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L1             1 SEA FILE=REGISTRY 67-47-0/RN
L2          3085 SEA FILE=CAPLUS L1
L3           122 SEA FILE=CAPLUS L2 AND PHARMACEUTIC?


=> d l3 1-122 ibib abs hitstr

L3   ANSWER 1 OF 122  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2007:1348016  CAPLUS
TITLE:                    Preparation of azithromycin derivatives as
                          antibacterials
INVENTOR(S):              Shen, Shunyi; Wang, Zhangyue; Zhu, Chuanxian; Ge, Han
PATENT ASSIGNEE(S):       Shanghai Institute of Pharmaceutical Industry, Peop.
                          Rep. China
SOURCE:                   Faming Zhuanli Shenqing Gongkai Shuomingshu, 27pp.
                          CODEN: CNXXEV
DOCUMENT TYPE:            Patent
LANGUAGE:                 Chinese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     CN 101074250          A     20071121    CN 2006-10026600        20060517
PRIORITY APPLN. INFO.:                      CN 2006-10026600        20060517
GI
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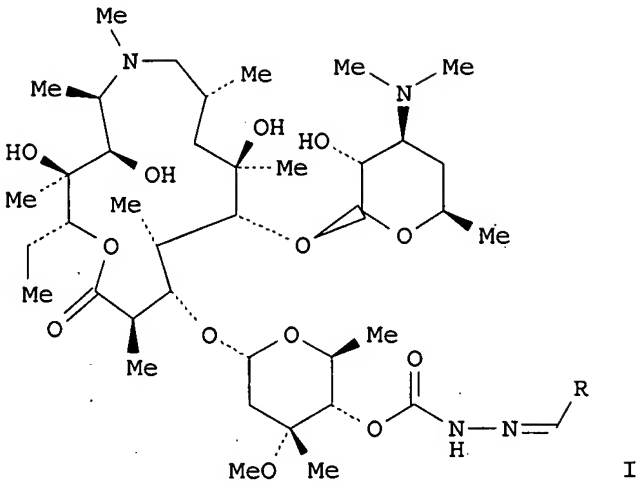


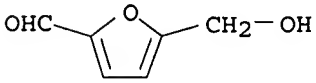
I

AB The invention relates to azithromycin derivative I (wherein R is R1 or AR1; A is C1-5 alkylene, C2-5 alkenylene, C2-5 alkynylene, C3-6 cycloalkylene, 3-6 membered sub-heterocyclic group or C6-10 arylidene containing 1-2 heteroatom from N, O and S; R1 is 5-15 membered aromatic ring containing 0-3 heteroatoms selected from N, O and S, wherein aromatic ring can be randomly substituted by substitution group). The invention also relates to pharmaceutical salt of the above azithromycin derivs. The invention further relates to application of azithromycin derivs. in preparing medicaments for preventing or treating bacterial infectious diseases.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of azithromycin derivs. as antibacterials)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 2 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1140948 CAPLUS

DOCUMENT NUMBER: 147:420129

TITLE: Use of α-ketoglutaric acid and 5-hydroxymethylfurfural for reducing oxidative stress

INVENTOR(S): Moser, Peter Michael; Greilberger, Joachim; Maier, Alfred; Juan, Heinz; Buecherl-Harrer, Christian; Kager, Ernst

PATENT ASSIGNEE(S): C.Y.L. Pharmazeutika GmbH, Austria

SOURCE: Eur. Pat. Appl., 7pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1842536	A1	20071010	EP 2007-104493	20070320
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				

IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU

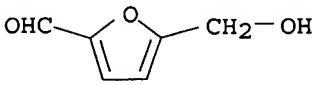
AT 503385	A1	20071015	AT 2006-464		20060320
PRIORITY APPLN. INFO.:			AT 2006-464	A	20060320

AB The invention discloses the use of α-ketoglutaric acid and 5-hydroxymethylfurfural for the preparation of a medicament for the treatment and prevention of oxidative stress in humans and animals, particularly for the reduction of reactive oxygen and nitrogen species and simultaneously increasing antioxidant capacity. The compds. of the invention can be used for the improvement of general conditions and improving performance.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α-ketoglutaric acid and 5-hydroxymethylfurfural for reducing oxidative stress)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	2007:796075 CAPLUS
DOCUMENT NUMBER:	147:243236
TITLE:	Application of 5-hydroxyfurfural in preparing antidiabetic pharmaceuticals
INVENTOR(S):	Zhang, Li; Chen, Ruoyun; Du, Guanhua; Luo, Yuehua; Tang, Yanbo; Hu, Juanjuan
PATENT ASSIGNEE(S):	Institute of Materia Medica, Chinese Academy of Medical Sciences, Peop. Rep. China
SOURCE:	Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp. CODEN: CNXXEV
DOCUMENT TYPE:	Patent
LANGUAGE:	Chinese
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

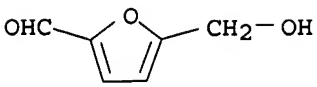
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 100998587	A	20070718	CN 2006-10000817	20060111
PRIORITY APPLN. INFO.:			CN 2006-10000817	20060111

AB The invention relates to application of 5-hydroxyfurfural in preparing pharmaceuticals for lowering blood sugar, preventing and/or treating diabetes mellitus and its complications. Specifically, 5-hydroxyfurfural can be prepared into tablet, capsule, pill, injection, controlled-release preparation, slow-release preparation and microparticle in the presence of pharmaceutical carriers.

IT 67-47-0
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(application of 5-hydroxyfurfural in preparing antidiabetic pharmaceuticals)

RN 67-47-0 CAPLUS

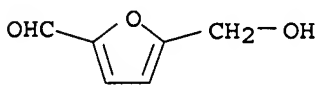
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 4 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:762934 CAPLUS
DOCUMENT NUMBER: 147:173158
TITLE: Investigation on influencing factors of 5-HMF content in Schisandra
AUTHOR(S): Xu, Qing; Li, Ying-hua; Lu, Xiu-yang
CORPORATE SOURCE: Institute of Pharmaceutical Engineering, Zhejiang University, Hangzhou, 310027, Peop. Rep. China
SOURCE: Journal of Zhejiang University, Science, B (2007), 8(6), 439-445
CODEN: JZUSAM; ISSN: 1673-1581
PUBLISHER: Zhejiang University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In order to investigate the influencing factors of 5-hydroxymethyl-2-furaldehyde (5-HMF) content in Schisandra, confirm the theory of 5-HMF deriving mainly from Schisandra processing course, and give some suggestions about the Schisandra processing method, the 5-HMF contents in decoctions of Schisandra under different heating temperature, decocting time, soaking time, processing methods and treatment with different solvents before decocting the Schisandra were measured by RP-HPLC method. The results showed that there is great difference of 5-HMF level in decoctions from differently processed Schisandra and unprocessed Schisandra; decocting time of 60 min has some effects on 5-HMF level in decoctions and there is certain quantity 5-HMF in processed Schisandra itself and very little 5-HMF in unprocessed Schisandra. Heating time, heating temperature and treating solvents all have effect on 5-HMF level in decoction of Schisandra. 5-HMF in Schisandra was mainly from processing course. Both long heating time and high heating temperature can increase 5-HMF level in Schisandra. The production of 5-HMF in Schisandra may have some relationships with some polar components, which can dissolve in water, ethanol and acetone, especially in ethanol. To control processing temperature, processing time and treatment with some solvent is very important for controlling 5-HMF level in Schisandra.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: NPO (Natural product occurrence); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(5-hydroxymethyl-2-furaldehyde content was increased with processing, soaking, decocting time, temperature and influenced with treating solvent and Schisandra chinensis (Trucz.) Baill. or Schisandra sphenanthera Rehd. et Wils. in Schisandra)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



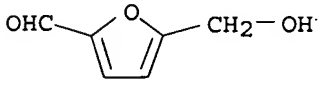
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:758613 CAPLUS

DOCUMENT NUMBER: 147:197593
TITLE: Using tolerance intervals in pre-study validation of analytical methods to predict in-study results
AUTHOR(S): Rozet, Eric; Hubert, Cedric; Ceccato, Attilio; Dewe, Walthere; Ziemons, Eric; Moonen, Francois; Michail, Karim; Wintersteiger, Reinhold; Streel, Bruno; Boulanger, Bruno; Hubert, Philippe
CORPORATE SOURCE: Laboratory of Analytical Chemistry, Bioanalytical Chemistry Research Unit, Institute of Pharmacy, CHU, University of Liege, Liege, B-4000, Belg.
SOURCE: Journal of Chromatography, A (2007), 1158(1-2), 126-137
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB It is recognized that the purpose of validation of anal. methods is to demonstrate that the method is suited for its intended purpose. Validation is not only required by regulatory authorities, but is also a decisive phase before the routine use of the method. For a quant. anal. method the objective is to quantify the target analytes with a known and suitable accuracy. For that purpose, first, a decision about the validity of the method based on prediction is proposed: a method is declared proper for routine application if it is considered that most of the future results generated will be accurate enough. This can be achieved by the "β-expectation tolerance interval" (accuracy profile) as the decision tool to assess the validity of the anal. method. Moreover, the concept of "fit-for-purpose" is also proposed here to select the most relevant response function as calibration curve, i.e. choosing a response function based solely on the predicted results this model will allow to obtain. This paper reports 4 case studies where the results obtained with quality control samples in routine were compared to predictions made in the validation phase. Predictions made using the "β-expectation tolerance interval" are shown to be accurate and trustful for decision making. It is therefore suggested that an adequate way to conciliate both the objectives of the anal. method in routine anal. and those of the validation step consists in taking the decision about the validity of the anal. method based on prediction of the future results using the most appropriate response function curve, i.e. the fit-for-future-purpose concept.

IT 67-47-0, Hydroxymethylfurfural
RL: ANT (Analyte); ANST (Analytical study)
(using tolerance intervals in pre-study validation of pharmaceutical anal. methods to predict in-study results)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

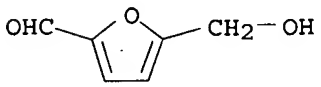
L3 ANSWER 6 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:696260 CAPLUS
DOCUMENT NUMBER: 147:174005
TITLE: Determination of 5-hydroxymethylfurfural in potassium magnesium aspartate and glucose injection by high-performance liquid chromatography
AUTHOR(S): Zhou, Hui; Wang, Dongkai; Xing, Junjia

CORPORATE SOURCE: Department of Pharmacy, First Affiliated Hospital, China Medical University, Shenyang, 110001, Peop. Rep. China
SOURCE: Zhongguo Yike Daxue Xuebao (2006), 35(1), 82-83, 86
CODEN: ZYDXEN; ISSN: 0258-4646
PUBLISHER: Zhongguo Yike Daxue
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB This paper aims to determine the level of 5-Hydroxymethylfurfural in potassium magnesium aspartate and glucose injection by high-performance liquid chromatog.(HPLC) and select the chromatog. conditions. C18(4.6 mm*200 mm) column using methanol-0.2% phosphoric acid(25:75) as mobile phase was used. The column temperature was 45°. The wave length for detection was 284 nm. The linear range of calibration curves of 5-HMF was 1 to 25 μg/mL. The average recovery was 97.89%, and the relative standard deviation was 0.52%. The method is simple and accurate with good stability and liner relationship.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); ANST (Analytical study)
(determination of 5-hydroxymethylfurfural in potassium magnesium aspartate and glucose injection by high-performance liquid chromatog.)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

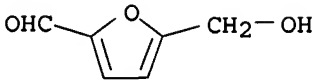


L3 ANSWER 7 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:651272 CAPLUS
TITLE: A GC-MS analysis on Lilium lancifolium and the lipophilic components in its water extract
AUTHOR(S): Zhang, Zhijie; Cai, Baochang; Wu, Luling; Li, Lin
CORPORATE SOURCE: College of Pharmacy, Nanjing University of Traditional Chinese Medicine, Nanjing, Jiangsu Province, 210029, Peop. Rep. China
SOURCE: Nanjing Zhongyiyao Daxue Xuebao (2006), 22(2), 91-93
CODEN: NZDXAU
PUBLISHER: Nanjing Zhongyiyao Daxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The lipophilic components in scale leaves of Lilium lancifolium and its extract by chloroform and water were analyzed. The contents, structure and percentage content of the extract of Lilium lancifolium were assayed by gas chromatog. in combination with mass spectrometry detector (GC-MS) method, mass spectrum bar graph anal. and NIST98 spectrum retrieval and peak area normalization method, resp. Thirty-five kinds of lipophilic components were identified from the chloroform extract of scale leaves of Lilium lancifolium, which accounted for 69.8%, and fifteen kinds of compds. were identified from the water extract Part of the low-polarity components in Lilium lancifolium had certain dissoln. rates. The experiment had provided the refs. for further study of a pharmacodynamic basis for Lilium lancifolium.

IT INDEXING IN PROGRESS
IT 67-47-0
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(a GC-MS anal. on Lilium lancifolium and the lipophilic components in its water extract)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 8 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:505118 CAPLUS
DOCUMENT NUMBER: 146:482074
TITLE: Preparation of azole heterocyclic compounds as G protein-coupled receptor kinase (GRK) inhibitors
INVENTOR(S): Kawamoto, Tetsuji; Okawa, Tomohiro; Hosono, Hiroshi; Ogino, Masaki
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 175pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007112789	A	20070510	JP 2006-249474	20060914
PRIORITY APPLN. INFO.:			JP 2005-276722 A	20050922

OTHER SOURCE(S): MARPAT 146:482074
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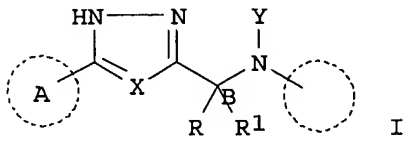
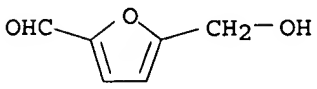


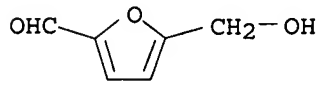
I

AB The title compds. [I; R = each (un)substituted amino-lower alkyl, N-containing heterocyclyl-lower alkyl, or N-containing heterocyclyl; R1 = H, lower alkyl, each (un)substituted amino-lower alkyl, N-containing heterocyclyl-lower alkyl, or N-containing heterocyclyl; or R and R1 are bonded to each other to form a N-containing heterocyclic ring; ring A = (un)substituted N-containing heterocyclic ring; ring B = (un)substituted aromatic ring; X = N, C-R2; R2 = H, halo, each (un)substituted hydrocarbyl, heterocyclyl, NH2, HO, or CONH2, NO2, cyano, optionally esterified CO2H, acyl; Y = H, each (un)substituted hydrocarbyl, heterocyclyl, or CONH2, optionally esterified CO2H, acyl] or salts thereof are prepared These compds. are useful as preventive and therapeutic agents of circulatory diseases such as heart failure, hypertension, and arteriosclerosis, etc., based on the potent GRK inhibitory action. Thus, (2S)-2-phenylamino-4-[(tert-butoxycarbonyl)amino]butanoic acid hydrazide underwent cycloaddn. reaction with 4-cyanopyridine NaOEt in ethanol at 95° for 15 h to give 3-[(tert-Butoxycarbonyl)amino]-1-phenylamino-1-[3-(4-pyridyl)-1H-1,2,4-triazol-5-yl]propane which was stirred in concentrated HCl at room temperature for 30 min to give 3-amino-1-phenylamino-1-[3-(4-pyridyl)-1H-1,2,4-triazol-5-yl]propane trihydrochloride (II). II in vitro inhibited the GRK2-dependent phosphorylation of bovine tubulin with IC50 of ≤250 μM. II and 2-amino-1-(3-chlorophenyl)amino-1-[3-(4-pyridyl)-1H-1,2,4-triazol-5-yl]ethane trihydrochloride promoted the accumulation of cAMP in HEK293 cells overexpressing human β2 receptor with EC50 of 3.0 and 0.58 μM, resp. Pharmaceutical

formulations, e.g. a capsule containing II, were prepared
IT 67-47-0, 5-(Hydroxymethyl)-2-furaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of azole heterocyclic compds. as G protein-coupled receptor kinase (GRK) inhibitors for prevention or treatment of circulatory diseases)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 9 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:480109 CAPLUS
DOCUMENT NUMBER: 147:101642
TITLE: Study on production process of famotidine and glucose injection
AUTHOR(S): Yin, Shuang; Tang, Yu
CORPORATE SOURCE: Sanjing Pharmaceutical Co., Ltd., Harbin Pharmaceutical Group, Harbin, 150000, Peop. Rep. China
SOURCE: Heilongjiang Yiyao (2007), 20(2), 135-136
CODEN: HYEIDM; ISSN: 1006-2882
PUBLISHER: Heilongjiang Sheng Yiyao Qingbao Zhongxinzhan
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The paper was to obtain optimal prescription and production process of famotidine and glucose Injection. The properties, color, and pH of the famotidine glucose injection and the degradation of main and subsidiary drugs were studied to optimize the prescription and production process of the famotidine glucose injection. Results showed that the optimum prescription and production process of the famotidine glucose injection were obtained. In conclusion, the prescription of the famotidine glucose injection was reasonable, and the production process was feasible.
IT 67-47-0, 5-Hydroxymethyl-2-furfural
RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
(study on production process of famotidine and glucose injection)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 10 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:463191 CAPLUS
DOCUMENT NUMBER: 146:462289
TITLE: Preparation of thio-triazolyl derivatives for treating diseases mediated directly or indirectly by KvI.5 ion channel antagonists
INVENTOR(S): Fichman, Merav; Chen, Dongli; Penland, Robert Christian; Reddy, A. Sekar; Mohanty, Pradyumna; Melendez, Rosa; Marantz, Yael; Schutz, Nili; Ramakrishna, Prasad; Shacham, Sharon; Saha, Ashis; Noiman, Silvia; Becker, Oren M.
PATENT ASSIGNEE(S): Epix Delaware, Inc., USA
SOURCE: PCT Int. Appl., 78pp.

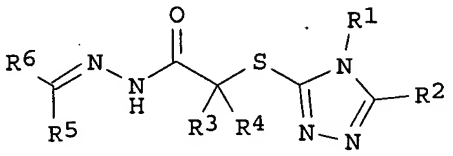
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007047394	A2	20070426	WO 2006-US39945	20061012

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-726436P P 20051013
OTHER SOURCE(S): MARPAT 146:462289
GI



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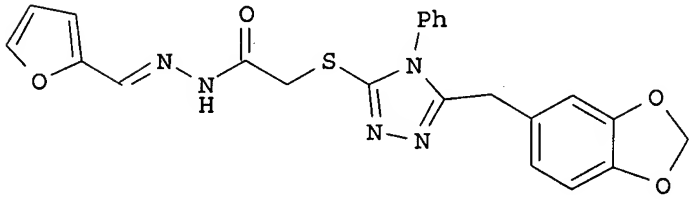


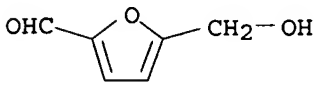
II

AB The invention relates to KvI.5 ion channel antagonists. Novel thio-triazolyl derivs. I, wherein R1 is substituted alkyl; alicyclic, heteroalicyclic, aryl, heteroaryl; R2 is alicyclic, heteroalicyclic, aryl, hetêroaryl, fused aryl, alicyclic or heterocyclic ring optionally substituted with one or more of a halogen, alkyl, alkoxy, cyano, hydroxyalkyl; amino, lower alkylamino, lower dialkylamino; sulfonamide, hydroxy group; R2 is optionally attached via alkyl linker in place of a direct bond; R3, R4 and R6 are independently H, alkyl; R5 is alicyclic, heteroalicyclic, aryl, heteroaryl, wherein the alicyclic, heteroalicyclic, aryl or heteroaryl groups independently are optionally substituted with one or more halogen, alkyl, alkoxy, cyano, aryl alkoxy, amino, hydroxy, sulfonamide; and R5 is optionally attached via alkyl linker in place of a direct bond, and synthesis and uses thereof for treating diseases mediated directly or indirectly by KvI.5 ion channels, are disclosed. Such conditions include numerous heart conditions including atrial fibrillation, arrhythmia, myocardial ischemia, and ventricular fibrillationand, as well as epilepsy, anxiety, depression, age-related

memory loss, migraine, obesity, Parkinson's disease or Alzheimer's disease. Methods of preparation and novel intermediates and pharmaceutical salts thereof are also provided. Thus, thio-triazolyl derivative II was prepared and may be used for treating diseases mediated directly or indirectly by KvI.5 ion channel antagonist (no biol. data). The compds. formulated for parenteral administration, such as i.v. or i.m. injection, other pharmaceutically acceptable forms include, e.g., tablets or other solids for oral administration; liposomal formulations; time-release capsules; and any other form currently used, including cremes.

IT 67-47-0, 5-Hydroxymethylfuran-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of thio-triazolyl derivs. for treating diseases mediated directly or indirectly by KvI.5 ion channel antagonists)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

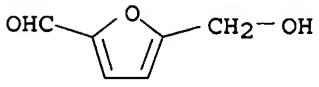


L3 ANSWER 11 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:442125 CAPLUS
DOCUMENT NUMBER: 146:468984
TITLE: Determination of metronidazole content and 5-hydroxymethyl limes in the metronidazole glucose solution by absorption linear combination
AUTHOR(S): Xu, Fei; Tian, Kaizhen; Zhu, Liqiong
CORPORATE SOURCE: People Hospital of Zhangjiajie City, Zhangjiajie, Hunan Province, 427000, Peop. Rep. China
SOURCE: Zhongguo Yiyuan Yaoxue Zazhi (2005), 25(10), 991-993
CODEN: ZYYAEP; ISSN: 1001-5213
PUBLISHER: Zhongguo Yiyuan Yaoxue Zazhi Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The metronidazole content and 5-hydroxymethyl limes in the metronidazole glucose solution were determined by absorption linear combination using 0.1 mol·L-1 HCl as solvent at the detection wavelength of 277, 280 and 284 nm, resp. The results showed that the average recovery of metronidazole was 99.71% (RSD=0.56%), and the average recovery of 5-HMF was 101.96% (RSD=2.08%). This method was accurate, precise and reliable, compared with the Chinese pharmacopoeia method.

IT 67-47-0
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(determination of metronidazole and 5-hydroxymethyl 2-furancarboxaldehyde in metronidazole glucose injection by UV spectrophotometry with absorption linear combination)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

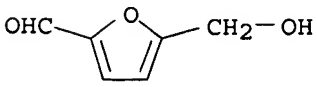


L3 ANSWER 12 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:422849 CAPLUS

DOCUMENT NUMBER: 146:507869
TITLE: On-line purity monitoring in high-speed counter-current chromatography: Application of HSCCC-HPLC-DAD for the preparation of 5-HMF, neomangiferin and mangiferin from Anemarrhena asphodeloides Bunge
AUTHOR(S): Zhou, Tingting; Zhu, Zhenyu; Wang, Chen; Fan, Guorong; Peng, Jinyong; Chai, Yifeng; Wu, Yutian
CORPORATE SOURCE: Shanghai Key Laboratory for Pharmaceutical Metabolite Research, School of Pharmacy, Second Military Medical University, Shanghai, 200433, Peop. Rep. China
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (2007), 44(1), 96-100
CODEN: JPBADA; ISSN: 0731-7085
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An efficient online purity monitoring strategy based on online coupling of high-speed counter-current chromatog. (HSCCC) with high-performance liquid chromatog.-diode array detection (HPLC-DAD) was successfully applied for the first time to the isolation and purification of 5-hydroxymethyl-2-furancarboxaldehyde (5-HMF), mangiferin and neomangiferin from the Chinese medicinal plant Anemarrhena asphodeloides Bunge, a plant used in the traditional Chinese medicine. The introduction of online purity monitoring in HSCCC has greatly improved the efficiency of this technique by overcoming the drawbacks of post-purification sample handling in HSCCC isolation. The effluent from the outlet of HSCCC was splitted into two parts, and one was collected, while the other was introduced directly through a switch valve into a HPLC-DAD system for purity monitoring. Using this method the desired fractions with high purities could be collected. From 600 mg partially purified extract, 165.6 mg neomangiferin and 292.8 mg mangiferin with purities of 98.9 and 99.5%, resp., were obtained with a two-phase solvent system composed of n-butanol-water (1:1, volume/volume) by increasing the flow-rate of the mobile phase stepwise from 1.0 to 2.2 mL min-1 after 210 min. A 17.1 mg 5-HMF with purity of 96.6% was also isolated for the first time.

IT 67-47-0P, 5-Hydroxymethyl-2-furancarboxaldehyde
RL: ANT (Analyte); NPO (Natural product occurrence); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(online purity monitoring in high-speed counter-current chromatog. for preparation of 5-HMF, neomangiferin and mangiferin from Anemarrhena asphodeloides Bunge)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

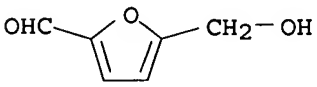
L3 ANSWER 13 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:417805 CAPLUS
DOCUMENT NUMBER: 147:113798
TITLE: The detection of bioactive components of the powder of bee-pollen - ethanol fraction
AUTHOR(S): Yamaguchi, Isao
CORPORATE SOURCE: Japan
SOURCE: Kenkyu Kiyo - Tokyo Kasei Daigaku, 2: Shizen Kagaku

(2007), 47, 29-34
CODEN: KKSKFZ; ISSN: 0385-1214
PUBLISHER: Tokyo Kasei Daigaku
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB About 21.8g of the dark brown-colored ethanol extract was dissolved in 30 mL of ethanol, and 1 μl of the solution was analyzed with the GC-MS equipment. The result showed in tables that 8 kinds of alkanes, 7 kinds of alkenes, 6 kinds of fatty acids. 13 Kinds of esters of fatty acids, 16 kinds of steroids, 3 kinds of ketones, 2 kinds of alcs., 4 kinds of sugar, 5 kinds of aromatic compds., and 8 kinds of miscellaneous compds. were detected.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(detection of bioactive components of powder of bee-pollen ethanol fraction)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

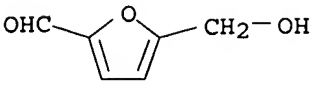


L3 ANSWER 14 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:302765 CAPLUS
DOCUMENT NUMBER: 146:513697
TITLE: Isolation and identification of potential cancer chemopreventive agents from methanolic extracts of green onion (Allium cepa)
AUTHOR(S): Xiao, Hang; Parkin, Kirk L.
CORPORATE SOURCE: Department of Food Science, University of Wisconsin-Madison, Madison, WI, 53706, USA
SOURCE: Phytochemistry (Elsevier) (2007), 68(7), 1059-1067
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Phase II xenobiotic metabolizing enzymes confer amelioration of risk arising from potentially carcinogenic chems. derived both endogenously, and exogenously, from food and the environment. In this study, efforts were made to isolate and identify potentially cancer preventive constituents from methanolic exts. of green onion (Allium cepa) directed by the quinone reductase (QR) induction bioassay using murine hepatoma (Hepa 1c1c7) cells. Crude methanolic exts. of green onion tissue were solvent-partitioned, and subsequently fractionated by flash chromatog., thin layer chromatog. and high pressure preparative liquid chromatog. to afford pure QR-inducing isolates. Multiple isolates were found active at inducing QR. One newly identified compound, 5-hydroxy-3-methyl-4-propylsulfanyl-5H-furan-2-one (3), and four known compds.: 5-(hydroxymethyl) furfural (1), acetovanillone (2), Me 4-hydroxyl cinnamate (4) and ferulic acid Me ester (5), were isolated and identified as active agents.

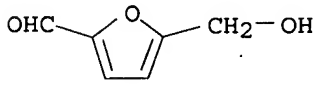
IT 67-47-0P, 5-(Hydroxymethyl) furfural
RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(isolation and identification of potential cancer chemopreventive agents from methanolic exts. of green onion)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:234364 CAPLUS
DOCUMENT NUMBER: 146:448686
TITLE: Chemistry study of Stellaria dichotoma
AUTHOR(S): Sun, Bohang; Yoshikawa, Masayuki; Chen, Yingjie; Wu, Lijun
CORPORATE SOURCE: School of Traditional Chinese Meteria Medica, Shenyang Pharmaceutical University, Shenyang, 110016, Peop. Rep. China
SOURCE: Shenyang Yaoke Daxue Xuebao (2006), 23(2), 84-87
CODEN: SYDXFF; ISSN: 1006-2858
PUBLISHER: Shenyang Yaoke Daxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The chemical constituents of Stellaria dichotoma were determined The extract was extracted with CHCl3, n-BuOH and H2O, then isolated with normal and reflect phase silica gel and HPL C. Ten compds. were identified as 5-(hydroxymethyl)-2-furfural(I), 5-pyrrole-2-2carboxaldehyde(II), vanillin(III), vanillic acid (IV), 1-(4-hydroxy-3-methoxyphenyl) ethanone(V), 1-hydroxy-1-(3'-methoxy- 4'5'-methylenedioxy) phenylpropane(VI), dihydroferulic acid(VII), 3, 4- dimethoxy-hydrocinnamic acid(VIII), stigmast-7-en-3-ol-palmitate(IX), and pinocembrin(X). The compds. I, III-VIII were isolated from Stellaria plants for the first time.
IT 67-47-0, 5-(Hydroxymethyl)-2-furfural
RL: ANT (Analyte); NPO (Natural product occurrence); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(chemical components separation and determination of Stellaria dichotoma)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 16 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:216252 CAPLUS
DOCUMENT NUMBER: 146:281299
TITLE: Examination of glucose degradation substance in gatifloxacin glucose injection
AUTHOR(S): Wang, Yajing
CORPORATE SOURCE: Pharmaceutical Center, Tianjin Institute of Pharmaceutical Research, Tianjin, 300193, Peop. Rep. China
SOURCE: Huaxi Yaoxue Zazhi (2006), 21(2), 204-205
CODEN: HYZAE2; ISSN: 1006-0103
PUBLISHER: Huaxi Yike Daxue Yaoxueyuan
DOCUMENT TYPE: Journal

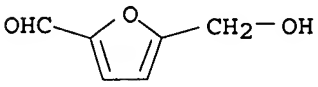
LANGUAGE: Chinese

AB The paper studied examination method of suitable glucose degradation substance in gatifloxacin glucose injection. According to the different phys. character between remedy and glucose degradation substance, a suitable ion-exchange resin was chosen in order to eliminate remedy selectively. It was proved that the examination method of glucose degradation substance was successful in quality control of gatifloxacin glucose injection. The method is accurate, applicable, and it is suitable for analogs examination of glucose degradation substance. It is better than controlling 5-hydroxymethylfurfural only.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process); USES (Uses)
(examination of glucose degradation substance in gatifloxacin glucose injection)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 17 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:186692 CAPLUS

DOCUMENT NUMBER: 146:398334

TITLE: Antioxidant constituents and a new triterpenoid glycoside from Flos Lonicerae

AUTHOR(S): Choi, Chun-Whan; Jung, Hyun Ah; Kang, Sam Sik; Choi, Jae Sue

CORPORATE SOURCE: Faculty of Food Science and Biotechnology, Pukyong National University, Pusan, 608-737, S. Korea

SOURCE: Archives of Pharmacal Research (2007), 30(1), 1-7
CODEN: APHRDQ; ISSN: 0253-6269

PUBLISHER: Pharmaceutical Society of Korea

DOCUMENT TYPE: Journal

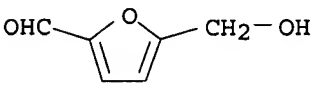
LANGUAGE: English

AB As a component of the continuing investigations into herb-derived antioxidant agents, the antioxidant effects of Flos Lonicerae (Lonicera japonica flowers) was evaluated, via 1,1-diphenyl-2-picrylhydrazyl (DPPH) radical, total reactive oxygen species (ROS), hydroxyl radical (·OH), and peroxynitrite (ONOO-) assays. Among the methanolic extract and the dichloromethane, Et acetate, n-butanol, and water fractions, the EtOAc fraction of Flos Lonicerae exhibited marked scavenging/inhibitory activities, as follows: IC50 values of 4.37, 27.58 ± 0.71, 0.47 ± 0.05, and 12.13 ± 0.79 μg/mL in the DPPH, total ROS, ONOO-, and ·OH assays, resp. Via a bioactivity-guided fractionation approach, a new triterpenoid glycoside, oleanolic acid 28-O-α-L-rhamnopyranosyl-(1→2)-[β-D-xylopyranosyl(1→6)]-β-D-glucopyranosyl ester (12), along with 11 known compds., including chrysoeriol (1), luteolin (2), 5-hydroxymethyl-2-furfural (3), caffeic acid (4), protocatechuic acid (5), chrysoeriol 7-O-β-D-glucopyranoside (6), isorhamnetin 3-O-β-D-glucopyranoside (7), kaempferol 3-O-β-D-glucopyranoside (8), quercetin 3-O-β-D-glucopyranoside (9), hederagenin 3-O-α-L-arabinopyranoside (10), and luteolin 7-O-β-D-glucopyranoside (11), were isolated from the EtOAc fraction. The structures of isolated compds. 1-12 were elucidated via spectroscopic analyses. Compound 12 was isolated

from a natural source for the 1st time. Compds. 2, 4, 5, 7, 9, and 11 evidenced marked scavenging activities, with IC50 values of 2.08-11.76 μM for DPPH radicals, and 1.47-6.98 μM for ONOO-.

IT 67-47-0, 5-Hydroxymethyl-2-furfural
RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
(antioxidant constituents and a new triterpenoid glycoside from Flos Lonicerae)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:150669 CAPLUS
DOCUMENT NUMBER: 146:229612
TITLE: Preparation of macrocyclic carboxylic acids, amides, and acylsulfonamides as inhibitors of HCV replication
INVENTOR(S): Seiwert, Scott D.; Blatt, Lawrence M.; Andrews, Steven W.; Martin, Pierre; Schumacher, Andreas; Barnett, Bradley R.; Eary, Todd C.; Kaus, Robert; Kercher, Timothy; Liu, Weidong; Lyon, Michael; Nichols, Paul; Wang, Bin; Sammakia, Tarek; Kennedy, April; Jiang, Yutong
PATENT ASSIGNEE(S): Intermune, Inc., USA; Array Biopharma Inc.
SOURCE: PCT Int. Appl., 512pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2007015824	A2	20070208	WO 2006-US27738		20060717
WO 2007015824	A3	20070719			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 2007054842	A1	20070308	US 2006-491126		20060721
PRIORITY APPLN. INFO.:			US 2005-702195P	P	20050725
			US 2005-725533P	P	20051011
			US 2006-789800P	P	20060406

OTHER SOURCE(S): CASREACT 146:229612; MARPAT 146:229612
GI

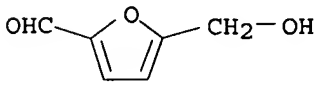
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to macrocyclic compds. I and analogs [R1 = H, OC(:O)R1; R1 = (un)substituted N-heteroaryl; R2 = OH, NHR5; R5 = Ph, alkyl, CN, cyclopropylcarbonyl, etc.; R3 = H, CH2R6, CSNH2, (un)substituted thiazol-2-yl, etc.; R6 = CF3, t-Bu, (un)substituted Ph, cyclopropyl, furanyl, etc.; R4 = H, cyclopropylmethyl; the dashed line represents an optional double bond], and their pharmaceutically acceptable salts, prodrugs, and esters for use in pharmaceutical compns. for the treatment of hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI in the presence of DCE and treatment with 1-methylcyclopropane-1-sulfonamide in the presence of DBU, showed IC50 < 0.1 μM in the NS3-NS4 protease inhibition assay.

IT 67-47-0, 5-(Hydroxymethyl)furan-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of macrocyclic carboxylic acids, amides, and acylsulfonamides as inhibitors of HCV replication)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 19 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:65800 CAPLUS

DOCUMENT NUMBER: 146:487127

TITLE: A variety of volatile compounds as markers in unifloral honey from dalmatian sage (Salvia officinalis L.)

AUTHOR(S): Jerkovic, Igor; Mastelic, Josip; Marijanovic, Zvonimir

CORPORATE SOURCE: Department of Organic Chemistry, Faculty of Chemistry and Technology, University of Split, Split, 21 000, Croatia

SOURCE: Chemistry & Biodiversity (2006), 3(12), 1307-1316
CODEN: CBHIAM; ISSN: 1612-1872

PUBLISHER: Verlag Helvetica Chimica Acta AG

DOCUMENT TYPE: Journal

LANGUAGE: English

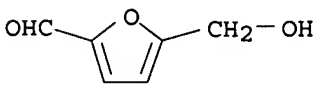
AB Volatile compds. of unifloral Salvia officinalis L. honey has been investigated for the first time. The botanical origin of ten unifloral Salvia honey samples has been ascertained by pollen anal. (the honey samples displayed 23-60% of Salvia pollen). Fifty-four volatile compds. were identified by GC and GC/MS in ten Salvia honey exts. obtained by ultrasound-assisted extraction with pentane/Et2O 1:2. The yield of isolated volatiles varied from 25.7 to 30.5 mg kg-1. Salvia honey could be distinguished on the basis of the high percentage of benzoic acid (6.4-14.8%), and especially phenylacetic acid (5.7-18.4%). Minor, but floral-origin important volatiles were identified such as shikimate pathway derivs., 'degraded-carotenoid-like' structures (3,5,5-trimethylcyclohex-2-ene derivs.) and 2,6,6-trimethylcyclohex-2-ene derivs. Compds. from other metabolic pathways such as aliphatic acids and higher linear hydrocarbons, as well as heterocycles (pyrans, furans, and pyrroles), were also present. Most of the identified compds. do not constitute specific Salvia honey markers, due to their presence in honeys of other botanical origins; however, their ratio in different honeys could be useful to distinguish floral origin. Salvia-honey volatile markers

were: benzoic acid, phenylacetic acid, p-anisaldehyde, α-isophorone, 4-ketoisophorone, dehydrovomifoliol, 2,6,6-trimethyl-4-oxocyclohex-2-ene-1-carbaldehyde, 2,2,6-trimethylcyclohexane-1,4-dione, and coumaran.

IT 67-47-0, 5-(Hydroxymethyl)furan-2-carboxaldehyde
RL: ANT (Analyte); FFD (Food or feed use); NPO (Natural product occurrence); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(volatile compds. as markers in unifloral honey from Dalmatian sage Salvia officinalis L.)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 20 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1229196 CAPLUS

DOCUMENT NUMBER: 146:7837

TITLE: Preparation of 3-cyanoquinolines as Tpl-2 kinase inhibitors for treating inflammatory diseases

INVENTOR(S): Green, Neal Jeffrey; Hu, Yonghan; Kaila, Neelu; Janz, Kristin Marie; Thomason, Jennifer R.; Li, Huan-Qiu; Hotchandani, Rajeev; Wu, Junjun; Gopalsamy, Ariamala; Tam, Steve Y.; Lin, Lih-Ling; Cuozzo, John William; Guler, Satenig Y.

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 240pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

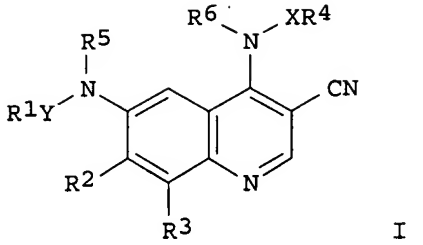
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006124692	A2	20061123	WO 2006-US18582	20060512
WO 2006124692	A3	20070412		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2006247520	A1	20061123	AU 2006-247520	20060512
US 2006264460	A1	20061123	US 2006-436485	20060518
PRIORITY APPLN. INFO.:			US 2005-682331P P	20050518
			WO 2006-US18582 W	20060512

OTHER SOURCE(S): MARPAT 146:7837

GI



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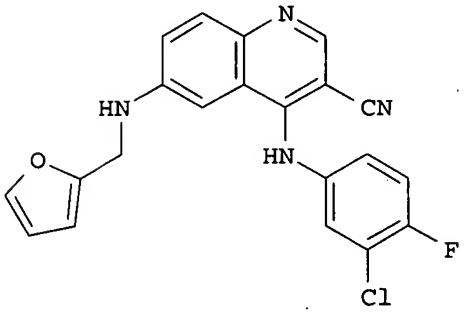


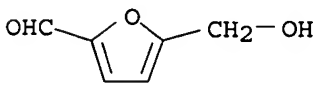
II

AB The invention is related to the preparation of cyanoquinolines I [R1 = (un)substituted cycloalkyl, hetero/aryl, cycloheteroalkyl; R2 = H, halo, CN, NO2, (un)substituted alk(en/yn)yl, aryl, etc.; R3 = H, halo, (un)substituted halo/alkyl, alkoxy, etc.; R4 = (un)substituted cyclo/alkyl, hetero/aryl, 3-10 membered cycloheteroalkyl; R5, R6 = independently H, CHO and derivs., CO2H and derivs., (un)substituted hetero/aryl, alk(en/yn)yl, etc.; Y = (CR72)m; X = (CR82)n; R7, R8 = independently H, halo, OH and derivs., NH2 and derivs., etc.; or CR72, CR82 = independently C:O; m = 0-4; n = 0-1; with the exception of two specified compds.], their analogs, and their pharmaceutically acceptable salts as Tpl-2 kinase inhibitors. The invention is also related to methods of using title compds. I for treating inflammatory diseases, such as rheumatoid arthritis (no data). Thus, cyclization of 2-cyano-3-(4-nitrophenylamino)acrylic acid Et ester, aromatization of quinolone with POCl3, amination of the chloride with 3-chloro-4-fluoroaniline, reduction of the nitro compound, and reductive alkylation of the amine with 2-furaldehyde gave cyanoquinoline II. Cyanoquinoline II inhibited Tpl-2 kinase with an IC50 value of 0.24 μM.

IT 67-47-0, 5-(Hydroxymethyl)furfural
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 3-cyanoquinolines as Tpl-2 kinase inhibitors for treating inflammatory diseases)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 21 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1173009 CAPLUS

DOCUMENT NUMBER: 146:13006

TITLE: Composition of traditional Chinese medicine for treating gynecopathy, methods for preparation and

quality control thereof
INVENTOR(S): Yang, Wenlong
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 13pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

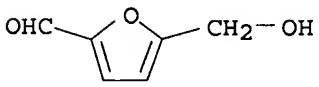
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1857527	A	20061108	CN 2006-10018541	20060309

PRIORITY APPLN. INFO.: CN 2006-10018541 20060309

AB The title traditional Chinese medicine composition is composed of (by weight parts): Rheum (fried) 2-10, Eupolyphaga sinensis 1-8, Whitmania 1-8, Prunus 1-6, Typha 1-6, Scutellaria baicalensis 1-5, Citrus aurantium 1-6, Ostrea 2-10, Rehmannia glutinosa 2-10, Paeonia lactiflora 1-6 and Glycyrrhiza 1. The traditional Chinese medicine composition can be further manufactured into tablets, capsules, soft capsules or dripping pills, preferential tablets. The traditional Chinese medicine composition can be used to treat gynecopathy, and has the advantages of high content of effective components, low effective dosage, high bioavailability, high curative effects, controllable quality, advanced manufacturing process and good reproducibility.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(composition of traditional Chinese medicine for treating gynecopathy, methods for preparation and quality control thereof)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



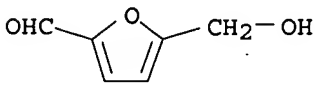
L3 ANSWER 22 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1144700 CAPLUS
DOCUMENT NUMBER: 145:511959
TITLE: Quality control method for Lujiao Buxue preparation
INVENTOR(S): Xu, Lei
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 15pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1850208	A	20061025	CN 2006-10200163	20060222

PRIORITY APPLN. INFO.: CN 2006-10200163 20060222

AB The quality control method for Lujiao Buxue preparation comprises (a) qual. identification of Rhizoma Atractylodis Macrocephalae; (b) qual. identification of Radix Rehmannia Preparata; (c) qual. identification of Radix Codonopsis; (d)quant. identification of astragaloside A. The method comprises thin layer chromatog. and high performance liquid chromatog. The quality control method is used in granule, pill, tablet, capsule, syrup,

mistura, fluid extract and extract
IT 67-47-0, 5-Hydroxymethyl furfural
RL: ANT (Analyte); ANST (Analytical study)
(quality control method for Lujiao Buxue preparation)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

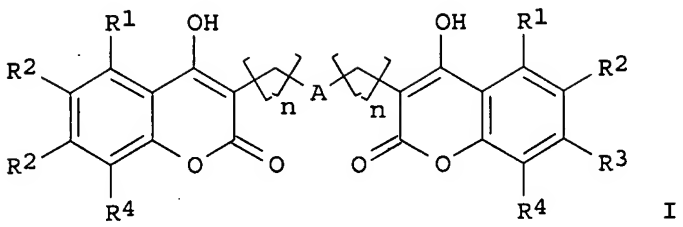


L3 ANSWER 23 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1120547 CAPLUS
DOCUMENT NUMBER: 145:454935
TITLE: Bis-(coumarin) compounds with antiinflammatory activity and their preparation, pharmaceutical compositions and use in the treatment of asthma and inflammatory diseases
INVENTOR(S): Mercep, Mladen; Malnar, Ivica; Hrvacic, Boska; Markovic, Stribor; Filipovic Sucic, Anita; Bosnjak, Berislav; Cempuh Klonkay, Andreja; Rupcic, Renata; Hutinec, Antun; Elenkov, Ivaylo Jivkov; Mesic, Milan
PATENT ASSIGNEE(S): GlaxoSmithKline Istrazivacki Centar Zagreb D.O.O., Croatia
SOURCE: PCT Int. Appl., 161pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006111858	A2	20061026	WO 2006-IB1259	20060113
WO 2006111858	A3	20061130		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
EP 1846387	A2	20071024	EP 2006-765427	20060113
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				

PRIORITY APPLN. INFO.:
US 2005-644359P P 20050114
US 2005-647793P P 20050127
WO 2006-IB1259 W 20060113

OTHER SOURCE(S): MARPAT 145:454935
GI



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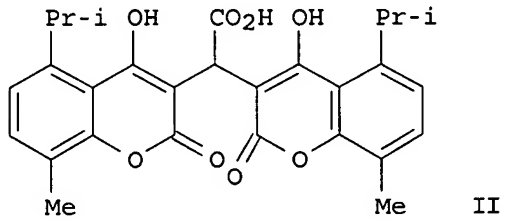


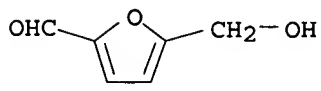
II

AB Certain bis-(coumarin) compds. of formula I as well as the products of their intramol. cyclization including pharmaceutically acceptable salts, hydrates, solvates, clathrates, prodrugs, tautomers and stereoisomers thereof are disclosed. Certain processes and intermediates for the preparation of certain bis-(coumarin) compds., as well as for the use of these compds. as therapeutically active agents in the prophylaxis and treatment of asthma and other inflammatory diseases and conditions in mammals, especially humans are also disclosed. Compds. of formula I wherein R1-R4 are independently H, F, Cl, Br, C1-4 (halo)alkyl, C2-4 alkenyl, C2-4 alkynyl, OH, C1-4 alkoxy, CF3, C1-4 alkanoyl, amino, (mono/di)C1-4 alkylamino, SH, C1-4 alkylthio, sulfo, C1-4 alkylsulfo, sulfino, C1-4 alkylsulfino, carboxy, C1-4 alkoxycarbonyl, CN and NO2; A is CO, CH-X, and C=NR5; n is 0 and 1; X is OH, carboxy, acetyl, alkylcarbonyl, formyl, (un)substituted C1-6 alkyl, and C(=NR5)R6; R5 is Oh, alkoxy, amino alkylamino, aryl and arylamino; R6 is H and Me; and their pharmaceutically acceptable salts, solvates, tautomers, and stereoisomers thereof are claimed. Example compound II was prepared by condensation of 4-hydroxy-5-isopropyl-8-methylcoumarin with glyoxylic acid. All the invention compds. were evaluated for their leukotriene B4 inhibitory activity. Several of the tested compds. exhibited good inhibitory activity at 10 μM.

IT 67-47-0, 5-(Hydroxymethyl)furan-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of biscoumarin compds. useful in prophylaxis and treatment of asthma and other inflammatory diseases)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 24 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1093311 CAPLUS

DOCUMENT NUMBER: 145:437232

TITLE: Polyclonal and monoclonal antibodies specific to advanced glycosylation end product for immunoassay and diagnosis of AGE-associated diseases

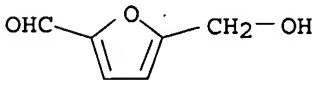
INVENTOR(S): Yamamoto, Takashi; Kimura, Yuko

PATENT ASSIGNEE(S): Jms Co., Ltd., Japan
SOURCE: PCT Int. Appl., 41pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006109599	A1	20061019	WO 2006-JP306906	20060331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006312621	A	20061116	JP 2006-94937	20060330
EP 1867659	A1	20071219	EP 2006-730854	20060331
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
KR 2007094950	A	20070927	KR 2007-717760	20070731
PRIORITY APPLN. INFO.:			JP 2005-108623 A	20050405
			WO 2006-JP306906 W	20060331

AB Disclosed is an antibody against an AGE derived from a carbonyl compound which is highly reactive with a protein or peptide. Also disclosed is a method for detecting the AGF. 3,4-dideoxyglucosone-3-ene (3,4-DGE) is reacted with a protein to produce a reaction product AGE. A host animal is immunized with the AGE, the serum is collected from the host animal, and an antibody against the AGE (anti-AGE antibody) is isolated from the serum. The presence or content of a AGE in a sample can be determined by allowing the isolated anti-AGE antibody to react with the sample and detecting the antigen-antibody reaction between the AGE and the anti-AGE antibody in the sample.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(polyclonal and monoclonal antibodies specific to advanced glycosylation end product for immunoassay and diagnosis of AGE-associated diseases)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

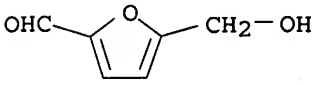
L3 ANSWER 25 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1079184 CAPLUS
DOCUMENT NUMBER: 146:407710
TITLE: Experimental study on analysis of ingredients of Jianguerxian gum
AUTHOR(S): Wang, Li-xin; Dang, Xiao-wu; Li, Quan; Qing, Mao-sheng

CORPORATE SOURCE: Department of Orthopedics, Shenzhen Hospital of TCM, Shenzhen,Guangdong, 518033, Peop. Rep. China
SOURCE: Zhongyiyao Xuebao (2006), 34(3), 29-30
CODEN: ZXHUCP; ISSN: 1002-2392
PUBLISHER: Zhongyiyao Xuebao Bianji Weiyuanhui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The aim of the paper was to analyze the ingredients of Jianguerxian gum. Gas chromatog. combined with mass spectrometry, HPLC, and flame atomic absorption spectrometry were used. The results from gas chromatog. combined with mass spectrometry showed that Jianguerxian gum mainly included C6H8O4, C6H6O3, C7H10N2O2, C14H28O2, C16H32O2, C18H34O2, C18H36O2, etc, wherein the content of protein was the highest (21.18%). The content of calcium was only 4.66%, and vitamin D was no detectable. In conclusion, the therapeutic mechanism of Jianguerxian gum against osteoporosis was not supplement of vitamin D and calcium.

IT 67-47-0, 5-Hydroxymethyl-2-furan-carboxaldehyde
RL: NPO (Natural product occurrence); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(medicine ingredients anal. of Jianguerxian gum)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

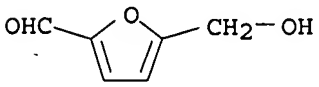


L3 ANSWER 26 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1065275 CAPLUS
DOCUMENT NUMBER: 147:15558
TITLE: Comparative analysis of steam distillation extraction method and supercritical CO2 fluid extraction method for extracting volatile oil from Ephedra sinica by gas chromatography-mass spectrometry
AUTHOR(S): Lao, Yan-xia; Chen, Kang; Lin, Wen-jin; Lin, Li
CORPORATE SOURCE: Guangzhou Wang Lao Ji Pharm. Com. Ltd., Guangzhou, Guangdong, 510450, Peop. Rep. China
SOURCE: Xiandai Zhongyao Yanjiu Yu Shijian (2005), 19(2), 53-56
CODEN: XZYYAA
PUBLISHER: Xiandai Zhongyao Yanjiu Yu Shijian Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB This paper compared the chemical components and their relative contends of volatile oil extracted from Ephedra sinica by the methods of steam distillation (SD) and supercrit. CO2 fluid extraction (SFE-CO2). This paper extracted the volatile oil of Ephedra sinica by steam distillation (SD) and supercrit. CO2 fluid extraction (SFE-CO2), then analyzed the extns. by gas chromatog.-mass spectrometry (GC-MS). The chemical components and their relative contends of volatile oil extracted by the above two methods were different. SFE-CO2 was superior to SD in increasing yield and shoring extractive time, and was a good method for the extraction of volatile oil from Ephedra sinica.

IT 67-47-0P, 5-Hydroxymethyl-2-furaldehyde
RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)
(comparative anal. of steam distillation extraction method and supercrit. CO2

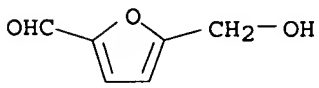
fluid extraction method for extracting volatile oil from Ephedra sinica by gas
chromatog.-mass spectrometry)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 27 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1030825 CAPLUS
DOCUMENT NUMBER: 145:383525
TITLE: Xanthine oxidase inhibitors for the treatment of hyperuricemia and gout
INVENTOR(S): Suwa, Yoshihide; Koshimizu, Seiichi; Nukaya, Haruo
PATENT ASSIGNEE(S): Suntory, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

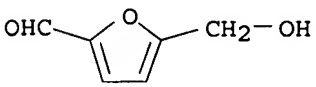
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006265174	A	20061005	JP 2005-85755	20050324
PRIORITY APPLN. INFO.:			JP 2005-85755	20050324

AB Claimed are xanthine oxidase inhibitors which are safely used daily for the treatment of hyperuricemia and gout; and foods, beverages, cosmetics, and oral pharmaceuticals containing the xanthine oxidase inhibitors. The xanthine oxidase inhibitors include 3,4,5-trihydroxybenzaldehyde, 3,4,5-trihydroxybenzyl alc., 1,2,3-benzenetriol carboxaldehyde, vanillic acid, vanillin, coniferyl aldehyde, cinnamic aldehyde, and 5-hydroxymethyl-2-furaldehyde.
IT 67-47-0, 5-Hydroxymethyl 2-furaldehyde
RL: COS (Cosmetic use); FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(xanthine oxidase inhibitors for treatment of hyperuricemia and gout)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

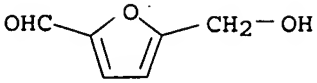


L3 ANSWER 28 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1028121 CAPLUS
DOCUMENT NUMBER: 147:125994
TITLE: Identification of liposoluble components of Ophiopogon japonicus by GC-MS
AUTHOR(S): Zhang, Xiao-yan; Zhang, Zhi-jie; Wu, Lu-ling; Zhang, Xu; Cai, Bao-chang
CORPORATE SOURCE: Jiangsu Provincial Research Center for Quality Control of Chinese Medicine, Nanjing University of Traditional Chinese Medicine, Nanjing, 210029, Peop. Rep. China
SOURCE: Zhongguo Xinyao Zazhi (2006), 15(15), 1281-1282, 1306

CODEN: ZXZHA6; ISSN: 1003-3734
PUBLISHER: Zhongguo Xinyao Zazhi Youxian Gongsi
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB This paper was aimed to analyzing the liposol. components of Ophiopogon japonicus. GC-MS was used to identify the chemical components of trichloromethane exts. of Ophiopogon japonicus. The structures of the identified components were confirmed by anal. of MS spectra and indexing of NIST98 spectral database. The GC-MS condition was optimized and thirty-two compds. were obtained. The GC-MS technique laid a basis for further anal. of active components of Ophiopogon japonicus.
IT 67-47-0, 5-Hydroxymethyl-2-furfural
RL: ANT (Analyte); NPO (Natural product occurrence); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(identification of liposol. components in Ophiopogon japonicus by gas chromatog. combined with mass spectrometry)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 29 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:998323 CAPLUS
DOCUMENT NUMBER: 146:13381
TITLE: Determination of degradation product 5-HMF in vinpocetine and glucose injection by HPLC
AUTHOR(S): Huang, Xunming
CORPORATE SOURCE: Hainan Tianya Pharmaceutical Factory, Haikou, 571159, Peop. Rep. China
SOURCE: Huaxi Yaoxue Zazhi (2005), 20(6), 546-547
CODEN: HYZAE2; ISSN: 1006-0103
PUBLISHER: Huaxi Yike Daxue Yaoxueyuan
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Objective: to establish a method for the determination of the degradation product
5-hydroxymethylfurfural (5-HMF) in vinpocetine and glucose injection. Methods: HPLC with Kromasil ODS-1 C18 column (4.6 mm x 250 mm) and UV detector was used. The mobile phase was 75:25 0.2% H3PO4-methanol, flow rate 1.0 mL/min, and detection wavelength 284 nm. External standard method was used for the assay of 5-HMF. Results: the linear range for 5-HMF was 1.0-20.0 μg/mL, detection limit 7.7 ng/mL, recovery of standard addition 99.5%, and RSD 1.0 % (n = 5). Conclusion: the method is simple, reliable, and accurate, and can be used for the determination of degradation product 5-HMF in
vinpocetine and glucose injection.
IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); FMU (Formation, unclassified); ANST (Analytical study); FORM (Formation, nonpreparative)
(determination of degradation product 5-HMF in vinpocetine and glucose injection by
HPLC)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

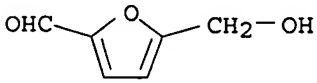


L3 ANSWER 30 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:737189 CAPLUS
DOCUMENT NUMBER: 145:404012
TITLE: Chinese medical composition and its preparation and quality control methods
INVENTOR(S): Xu, Ming
PATENT ASSIGNEE(S): Beijing Kairui Innovative Pharmaceutical Science and Technology Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 14 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1803180	A	20060719	CN 2005-10200030	20050113
PRIORITY APPLN. INFO.:			CN 2005-10200030	20050113

AB The Chinese medical composition is made from cooked Rehmannia glutinosa 450-550, yam 200-250, Poria cocos 120-160, tree peony bark 120-160, Alisma orientalis 120-160, Polygala sibirica 120-160, dragon bone (Os Draconis, animal bone fossil) 350-400, Ligustrum lucidum 200-250, Phellodendron amurense 120-160, Anemarrhena asphodeloides 60-80, Chinese magnolcavine fruit 60-80 and Acorus tatarinowii 200-250 weight part. The invention relates to preparation of Chinese medical composition, such as granule, capsule, soft capsule, pill or tablet, by water extraction The 5-hydroxymethylfurfural, sarsasapogenin, paeoniflorin and berberine hydrochloride in the medical composition are all identified by TLC on silica gel G plate with petroleum ether-Et acetate(1:1), toluene-acetone(9:1), Et acetate-methanol-water(10:3:1) and toluene-Et acetate-isopropanol-methanol-ammonia(6:3:1.5:1.5:0.5) as developing agent resp. The berberine hydrochloride content in the medical composition is determined by HPLC on octadecyl silane column at 265 nm with 0.05 mol/L potassium dihydrogen phosphate-acetonitrile(75:25) as mobil phase. The invention also relates to use of the Chinese medical composition for preparing drugs for treating hyperactivity in children.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); PAC (Pharmacological activity); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Chinese medical composition and its preparation and quality control methods)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



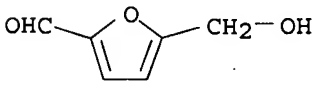
L3 ANSWER 31 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:620081 CAPLUS

DOCUMENT NUMBER: 145:152921
TITLE: Method for simultaneously detecting contents of protocatechuic acid and 5-hydroxymethylfurfural in shengmai injection with HPLC
INVENTOR(S): Zeng, Xiaochun
PATENT ASSIGNEE(S): Yaan Sanjiu Pharmaceutical Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1790013	A	20060621	CN 2004-10081501	20041216
PRIORITY APPLN. INFO.:			CN 2004-10081501	20041216

AB The title method comprises recrystg. crude protocatechuic acid with acetone and dichloromethane, vacuum-drying at 80°C, and quantitating by electrotitration with 0.1M NaOH solution and HPLC, wherein mobile phase and fillers are acetonitrile/ammonium acetate/glacial acetic acid and octadecyl silane bonding silica gel resp. The contents of protocatechuic acid and 5-hydroxymethylfurfural in Shengmai injection are determined by external standard method. The method has the advantages of accuracy and simplicity.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for simultaneously detecting contents of protocatechuic acid and 5-hydroxymethylfurfural in shengmai injection with HPLC)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 32 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:529715 CAPLUS
DOCUMENT NUMBER: 145:195937
TITLE: Comparison of the volatile compounds of Atractylodes medicinal plants by headspace solid-phase microextraction-gas chromatography-mass spectrometry
AUTHOR(S): Guo, Fang-Qiu; Huang, Lan-Fang; Zhou, Shao-Yun; Zhang, Tai-Ming; Liang, Yi-Zeng
CORPORATE SOURCE: College of Chemistry and Chemical Engineering, Research Center for Modernization of Chinese Herbal Medicine, Central South University, Changsha, 410083, Peop. Rep. China
SOURCE: Analytica Chimica Acta (2006), 570(1), 73-78
CODEN: ACACAM; ISSN: 0003-2670
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

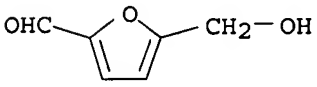
AB Atractylodes macrocephala (baizhu) and Atractylodes lancea (cangzhu), which are two famous Atractylodes medicinal plants, have traditionally been used as important ingredient of several Chinese herbal medicines. The volatile constituents are the main active components in them. To avoid the traditional and time-consuming hydrodistn., the analyses of

volatile components in baizhu and cangzhu were carried out by means of headspace solid-phase microextn. (HS-SPME) coupled to gas chromatog.-mass spectrometry (GC-MS). The headspace volatiles were collected using a polydimethylsiloxane-divinylbenzene (PDMS-DVB, 65 μm) fiber. The extraction conditions including extraction temperature, equilibrium time, extraction time and desorption time were optimized using the total peak areas as index. The best response was obtained when the extraction temperature, equilibrium time, extraction time and desorption time were 70°, 30, 30 and 4 min, resp. Thirty-six components representing 90.72% of the total peak areas of baizhu were identified. The highest content component of the HS-SPME sample of baizhu was atractylone (40.12%). For cangzhu, 56 components representing 90.38% of the total peak areas of cangzhu were identified and the highest content component of the HS-SPME sample of cangzhu was eudesma-4(14),11-diene (16.49%). This study showed that baizhu and cangzhu have 23 common components. The result suggested the developed method could be used to compare the similarities and differences between the above-mentioned two Chinese herbs.

IT 67-47-0, 5-(Hydroxymethyl)-2-furancarboxaldehyde
RL: NPO (Natural product occurrence); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(comparison of volatile compds. of Atractylodes medicinal plants by headspace solid-phase microextn.-gas chromatog.-mass spectrometry)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 33 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:383706 CAPLUS

DOCUMENT NUMBER: 144:412277

TITLE: Preparation of novel curcumin analogs for use in pharmaceutical compositions as androgen receptor antagonists

INVENTOR(S): Lee, Kuo-Hsiung; Lin, Li; Shih, Charles C-Y.; Su, Ching-Yuan; Ishida, Junko; Ohtsu, Hironori; Wang, Hui-Kang; Itokawa, Hideji; Chang, Chawnshang

PATENT ASSIGNEE(S): University of North Carolina At Chapel Hill, USA

SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

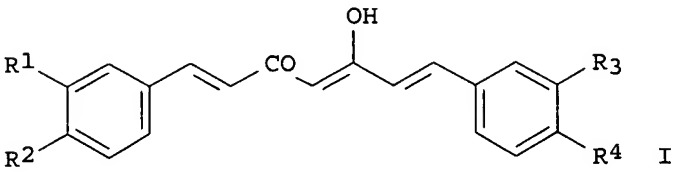
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006044379	A2	20060427	WO 2005-US36522	20051012
WO 2006044379	A3	20060615		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,

YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 2005187255	A1	20050825	US 2004-966723		20041015
AU 2005295876	A1	20060427	AU 2005-295876		20051012
CA 2583943	A1	20060427	CA 2005-2583943		20051012
EP 1799213	A2	20070627	EP 2005-815933		20051012
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR					
CN 101076336	A	20071121	CN 2005-80042393		20051012
PRIORITY APPLN. INFO.:			US 2004-966723	A	20041015
			US 2002-124642	A1	20020417
			WO 2003-US9350	A2	20030327
			WO 2005-US36522	W	20051012

OTHER SOURCE(S): MARPAT 144:412277
GI

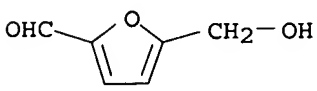


I

AB Curcumin analogs, such as I [R1-4 = H, OH, alkoxy, etc.], were prepared for therapeutic use as as androgen receptor antagonists. These curcumin analogs were claimed for use in the treatment of androgen-related disorders which may include cancers of the colon, skin and prostate, as well as for treatment of baldness, hirsutism, behavioral disorders, acne and uninhibited spermatogenesis wherein inhibition of spermatogenesis is so desired. Thus, curcumin I (R1 = R3 = OMe, R2 = R4 = OH) was O-methylated using diazomethane in Et2O and MeOH to give di-O-methylated curcumin derivative I (R1 = R2 = R3 = R4 = OMe) with 19.8% yield. The prepared curcumin analogs were assayed for androgen receptor transactivation and for their effect on LNCaP cell growth.

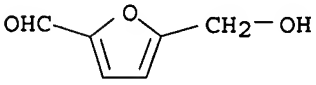
IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of novel curcumin analogs for use in pharmaceutical compns. as androgen receptor antagonists)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 34 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:377802 CAPLUS
DOCUMENT NUMBER: 145:306268
TITLE: Effects of Eucommia ulmoides Oliver leaf extract on 3T3-L1 differentiation into adipocytes
AUTHOR(S): Matsuda, Eriko; Yoshizawa, Yuko; Yokosawa, Yuki;

Watanabe, Naomi; Kawaii, Satoru; Murofushi, Noboru
CORPORATE SOURCE: Laboratory of Bio-organic Chemistry, Akita Prefectural University, Akita, 010-0195, Japan
SOURCE: Journal of Natural Medicines (2006), 60(2), 126-129
CODEN: JNMOBN
PUBLISHER: Springer Tokyo
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The extract prepared from roasted Eucommia ulmoides Oliver leaves, Du-Zhong tea, was examined to explore its effect on differentiation of mouse 3T3-L1 preadipocyte cells into adipocytes. The boiling water extract of Du-Zhong tea inhibited lipid accumulation in 3T3-L1. The HPLC anal. of the extract identified catechin, protocatechuic acid, pyrogallol, and chlorogenic acid. Catechin weakly inhibited lipid accumulation after 3T3-L1 differentiation, while protocatechuic acid and chlorogenic acid showed almost no effect. The activity guided separation of Du-Zhong tea lead the isolation of 5-hydroxymethyl-2-furaldehyde (HMF). HMF inhibited lipid accumulation at a concentration of 100 μM, and the amount of lipid in the cells was reduced to the similar level of neg. control. This is the first isolation of HMF from Du-Zhong tea and the first observation of its effect on 3T3-L1 differentiation.
IT 67-47-0P, 5-Hydroxymethyl-2-furaldehyde
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(5-hydroxymethyl-2-furaldehyde inhibited lipid accumulation in 3T3-L1 cell)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

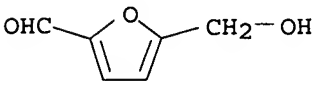
L3 ANSWER 35 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:319955 CAPLUS
DOCUMENT NUMBER: 144:310953
TITLE: Evaluation of front-face fluorescence for assessing thermal processing of milk
AUTHOR(S): Schamberger, Gerry P.; Labuza, Theodore P.
CORPORATE SOURCE: Dept. of Food Science and Nutrition, Univ. of Minnesota, St. Paul, MN, 55108, USA
SOURCE: Journal of Food Science (2006), 71(2), C69-C74
CODEN: JFDSAZ; ISSN: 0022-1147
PUBLISHER: Institute of Food Technologists
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The use of front-face fluorescence spectroscopy (FFFS) was assessed for its ability to monitor the development of Maillard browning in milk during thermal processing. Skim milk was processed using a Microthermics thermal processing system for a range of conditions from 70 °C to 140 °C from 3 to 30 s. Milk was analyzed using FFFS, Hunter L*, a*, b*, hydroxymethylfurfural (HMF), tryptophan, and optical d. FFFS and HMF were found to be the most sensitive methods for distinguishing the heat treatment of milk. Activation energies of 126 and 190 kJ/mol were found for HMF and FFFS, resp. A strong correlation was found between these 2 methods. As a fast nonpreparatory method, FFFS is quite useful for

evaluating the effect on the 1st stages of the Maillard reaction caused by the heat processing of milk. This work indicates that FFFS with no sample preparation has the potential to be of use as an online instrument for monitoring and control of thermal processing of milk; it can be applied as a process anal. technol. (PAT) as is being done in the pharmaceutical industry with other methods.

IT 67-47-0, Hydroxymethylfurfural
RL: ANT (Analyte); ANST (Analytical study)
(Maillard browning in thermal processed milk assessed by front-face fluorescence)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 36 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:212297 CAPLUS

DOCUMENT NUMBER: 144:274134

TITLE: Preparation of isoindolin-1-one derivatives that inhibit the MDM2-p53 interaction for use against cancer

INVENTOR(S): Willems, Hendrika Maria Gerarda; Kallblad, Per; Hardcastel, Ian Robert; Griffin, Roger John; Golding, Bernard Thomas; Lunec, John; Nobel, Martin E. M.; Newell, David R.; Calvert, Alan H.

PATENT ASSIGNEE(S): Cancer Research Technology Limited, UK

SOURCE: PCT Int. Appl., 153 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

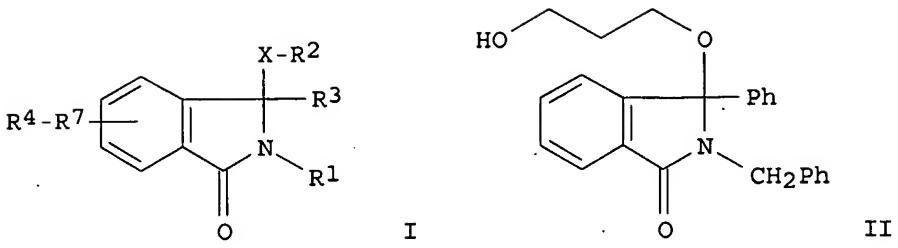
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006024837	A1	20060309	WO 2005-GB3345	20050826
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005278962	A1	20060309	AU 2005-278962	20050826
CA 2578955	A1	20060309	CA 2005-2578955	20050826
EP 1786773	A1	20070523	EP 2005-782577	20050826
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				

PRIORITY APPLN. INFO.: GB 2004-19481 A 20040902
WO 2005-GB3345 W 20050826

OTHER SOURCE(S): MARPAT 144:274134

GI



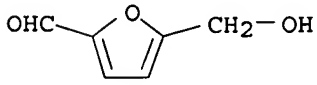
I II

AB Disclosed are isoindolin-1-one derivs. (shown as I; variables defined below; e.g. 2-benzyl-3-(3-Hydroxypropoxy)-3-phenyl-2,3-dihydro-1H-isoindol-1-one (shown as II)) or a prodrug and/or pharmaceutically acceptable salt thereof that inhibit the MDM2-p53 interaction and are useful against cancer (e.g. osteosarcoma). For I: X = O, N or S; R1 = H, halo, hydroxy, (un)substituted alkyl, (un)substituted hydroxyalkyl, (un)substituted alkylamine, alkoxy, (un)substituted aryl or heteroaryl, and (un)substituted aralkyl or heteroaralkyl; R2 = H, halo, hydroxy, (un)substituted alkyl, (un)substituted hydroxyalkyl (un)substituted alkylamine, alkoxy, (un)substituted aryl or heteroaryl, and (un)substituted aralkyl or heteroalkyl; R3 = H, halo, hydroxy, (un)substituted alkyl, (un)substituted hydroxyalkyl, (un)substituted alkylamine, alkoxy, (un)substituted aryl or heteroaryl, and (un)substituted aralkyl or heteroalkyl; and R4-R7 = H, OH, alkyl, alkoxy, alkylamine, hydroxyalkyl, halo, CF3, NH2, NO2, COOH, C:O. Although the methods of preparation are not claimed, prepns. and/or characterization data for many examples of I are included. For example, II was prepared (35 %) from 2-Benzyl-3-chloro-3-phenyl-2,3-dihydro-1H-isoindol-1-one (preparation described) and 1,3-propanediol.

IT 67-47-0, 5-Hydroxymethylfuran-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isoindolin-1-one derivs. that inhibit the MDM2-p53 interaction for use against cancer)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 37 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1317104 CAPLUS

DOCUMENT NUMBER: 144:94554

TITLE: Determination of chemical constituents in Rhizoma Acori Tatarinowii decoction by GC-MS

AUTHOR(S): Wei, Gang; Lin, Shuangfeng; Fang, Yongqi

CORPORATE SOURCE: First Affiliated Hospital, Guangzhou University of Traditional Chinese Medicine, Guangzhou, 510405, Peop. Rep. China

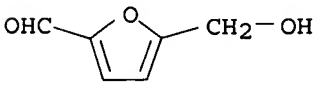
SOURCE: Guangzhou Zhongyiyao Daxue Xuebao (2005), 22(2), 147-149

CODEN: GZDXFQ; ISSN: 1007-3213
PUBLISHER: Guangzhou Zhongyiyao Daxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The main chemical constituents in decoction and concentrated decoction of Rhizoma
Acori Tatarinowii (RAT) were analyzed by gas chromatog.-mass spectrometry (GC-MS). RAT was decocted and concentrated in the pottery for two times, and then 6 batches of the decoction and their concentrated decoction were analyzed by GC-MS. Five components in a higher amount were found in the first and second decoction of RAT, including: β-asarone, α-asarone, 2,3-dihydro-3,5-dihydroxy-6-methyl-4H-pyran-4-one, 5-hydroxymethylfurfural and acoramone. The contents of volatile components, α-asarone and β-asarone, were lower, and those of water-soluble components were higher in the concentrated decoction of RAT. The therapeutic effects of RAT were the coaction of the multiple components in RAT and related not only with the volatile components but also with the water-soluble components. More attention should be paid to the difference of the components in the clin. used decoction and in the concentrated decoction, which was generally used in the research of new Chinese herbal medicine.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); ANST (Analytical study)
(determination of chemical constituents in Rhizoma Acori Tatarinowii decoction by GC-MS)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 38 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1240986 CAPLUS
DOCUMENT NUMBER: 144:22906
TITLE: Preparation of fused heterocycle kinase inhibitors for treatment of protein tyrosine kinase-related diseases
INVENTOR(S): Cusack, Kevin; Salmeron-Garcia, Jose-Andres; Gordon, Thomas D.; Barberis, Claude E.; Allen, Hamish J.; Bischoff, Agniezka K.; Ericsson, Anna M.; Friedman, Michael M.; George, Dawn M.; Roth, Gregory P.; Talanian, Robert V.; Thomas, Christine; Wallace, Grier A.; Wishart, Neil; Yu, Zhengtian
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 362 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005110410	A2	20051124	WO 2005-US16903	20050513
WO 2005110410	A3	20070329		

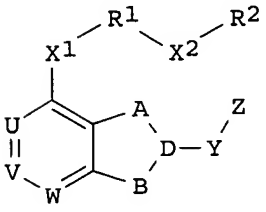
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,

SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2566158	A1	20051124	CA 2005-2566158	20050513
US 2006074102	A1	20060406	US 2005-129624	20050513
EP 1753428	A2	20070221	EP 2005-778736	20050513
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
JP 2007537296	T	20071220	JP 2007-513433	20050513
PRIORITY APPLN. INFO.:			US 2004-571281P	P 20040514
			WO 2005-US16903	W 20050513

OTHER SOURCE(S): MARPAT 144:22906

GI



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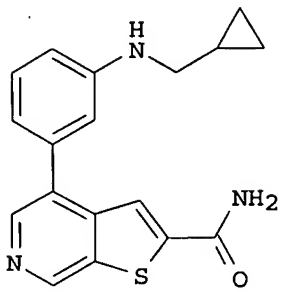


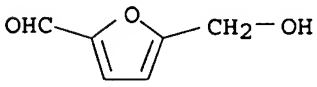
II

AB The invention is related to the preparation of fused heterocycles of formula I [A, B = independently N, S, O, a bond, etc.; D = C, N, S, O, C:C; U, V, W = independently CH and derivs., N; Y = a bond, CONH2 and derivs., SO, etc.; Z = H, halo, CN, etc.; X1 = a bond, halo, O, SO, NHSO2, etc.; R1 = a bond, (un)substituted benzofuranyl, benzimidazolyl, pyrrolyl, etc.; when R1 is not a bond, then X2 = a bond, O,S, NHCO and derivs., aliphatic group, etc.; or when R1 = a bond, then X2 = a bond and R2 is not a bond; R2 = a bond or (un)substituted benzoxazolyl, Ph, etc.; with provisos; and with the exception of certain compds.], and their pharmaceutically acceptable salts as inhibitors of kinases, particularly COT or MK2 kinases. The invention is also related to the use of certain compds. I as inhibitors of angiogenic receptor tyrosine kinases. Thus, reacting 4-(3-aminophenyl)thieno[2,3-c]pyridine-2-carboxamide with cyclopropanecarboxaldehyde gave thienopyridine II. All compds. I significantly inhibit either COT or MK2 at concns. of 50 μM or below.

IT 67-47-0, 5-Hydroxymethylfuran-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fused heterocycles as kinase inhibitors)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

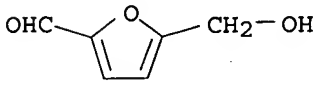


L3 ANSWER 39 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1117211 CAPLUS
DOCUMENT NUMBER: 143:399848
TITLE: Use of 5-hydroxymethyl furaldehyde in preparation of medicines for treating nervous system diseases
INVENTOR(S): Li, Lin; Wei, Haifeng; Zhang, Lan; Zhao, Ling; Chu, Jin
PATENT ASSIGNEE(S): Xuanwu Hospital Attached To Capital University of Medical Sciences, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 17 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1565438	A	20050119	CN 2003-146245	20030704
PRIORITY APPLN. INFO.:			CN 2003-146245	20030704

AB The invention relates to the use of 5-hydroxymethyl furaldehyde and its derivs. in the preparation of medicines for preventing and/or treating nervous system diseases. The compds. are effective in relieving ischemia and hypoxia of nerves and functional disturbances caused by nerve injury, alleviating edema of nerve cells, enhancing the function of scavenging free radicals, preventing the damages due to free radicals, and reducing calcium overload of nerve cells. The invention also provides pharmaceutical compns. containing 5-hydroxymethyl furaldehyde or its derivs. as active ingredient and the application of 5-hydroxymethyl furaldehyde or its derivs. in the prevention and/or treatment of nervous system diseases.

IT 67-47-0, 5-Hydroxymethyl furaldehyde
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of 5-hydroxymethyl furaldehydes in preparation of medicines for treating nervous system diseases)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 40 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1004745 CAPLUS
DOCUMENT NUMBER: 143:306333
TITLE: Production of 8-[3-aminopiperidin-1-yl]xanthine derivatives and their use as DPP-IV inhibitors
INVENTOR(S): Himmelsbach, Frank; Langkopf, Elke; Eckhardt, Matthias; Tadayyon, Mohammad; Thomas, Leo
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany; Boheringer Ingelheim Pharma G.m.b.H. & Co. K.-G.
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2005085246	A1	20050915	WO 2005-EP1427	20050212
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 102004008112	A1	20050901	DE 2004-102004008112	20040218
DE 102004012921	A1	20051013	DE 2004-102004012921	20040317
DE 102004032263	A1	20060119	DE 2004-102004032263	20040703
AU 2005219508	A1	20050915	AU 2005-219508	20050212
CA 2555050	A1	20050915	CA 2005-2555050	20050212
EP 1758905	A1	20070307	EP 2005-707354	20050212
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
CN 1980930	A	20070613	CN 2005-80005423	20050212
BR 2005007873	A	20070724	BR 2005-7873	20050212
JP 2007522251	T	20070809	JP 2006-553504	20050212
NO 2006002688	A	20060914	NO 2006-2688	20060609
IN 2006DN04175	A	20070713	IN 2006-DN4175	20060719
MX 2006PA09289	A	20061009	MX 2006-PA9289	20060816
KR 2007006780	A	20070111	KR 2006-719124	20060918
PRIORITY APPLN. INFO.:			DE 2004-102004008112A	20040218
			DE 2004-102004012921A	20040317
			DE 2004-102004032263A	20040703
			WO 2005-EP1427 W	20050212

OTHER SOURCE(S): MARPAT 143:306333

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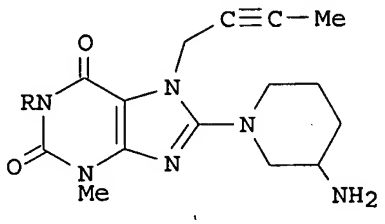

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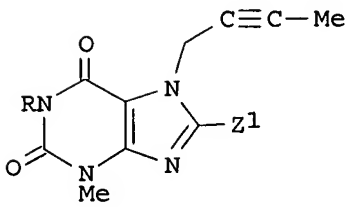
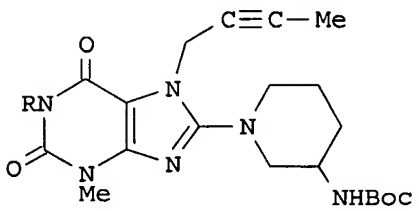


II



III

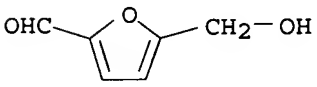
AB The invention relates to substituted xanthines, e.g., I [R = CH2Ph,

CH2C6H4-R', 2,6-dicyanobenzyl, 3,4-dicyanobenzyl, 3,5-dicyanobenzyl, 2-(trifluoromethyl)-4-cyanobenzyl, 4-cyano-3-nitrobenzyl, 2-cyano-3-methoxybenzyl, 2-cyano-4-methoxybenzyl, 2-cyano-5-methoxybenzyl, 2-cyano-4-fluorobenzyl, 2-cyano-5-fluorobenzyl, 2-cyano-6-fluorobenzyl, 3-cyano-4-fluorobenzyl, 4-cyano-3-fluorobenzyl, 4-cyano-2-fluorobenzyl, 3-chloro-2-cyanobenzyl, 2-chloro-4-cyanobenzyl, 4-bromo-2-cyanobenzyl, 2-fluoro-3-methoxybenzyl, 2-fluoro-4-methoxybenzyl, 2-fluoro-5-methoxybenzyl, 3-fluoro-4-methoxybenzyl, 3,4-dimethoxybenzyl, 3,5-dimethoxybenzyl, 3,4-dimethoxy-6-fluorobenzyl, (benzo[1,3]dioxol-5-yl)methyl, (4-cyanobenzo[1,3]dioxol-5-yl)methyl, etc.; R' = 2-F, 3-F, 4-F, 2,6-F2,3,4-F2, 2-Cl, 3-Cl, 4-Cl, 2-CF3, 3-CF3, 4-CF3, 3-CF3O, 4-CF3O, 2-CN, 3-CN, 4-CN, 2-MeO, 3-MeO, 4-MeO], and to its tautomers, stereoisomers, mixts. and pharmaceutically acceptable salts, said products exhibiting precious pharmacol. properties, in particular an inhibiting effect on a dipeptidylpeptidase-IV (DPP-IV) enzyme activity. The procedure for the preparation of I comprises: (a) reaction of xanthine II [Z1 = halogen, substituted OH, substituted SH, sulfinyl, sulfonyl, sulfonyloxy group] with (±)-, (R)- or (S)-3-aminopiperidine or (±)-, (R)- or (S)-3-(Boc-amino)piperidine [Boc = CO2CMe3] or their salts; and (b) dealkoxycarbonylation of protected 8-[3-aminopiperidin-1-yl]xanthine III [Boc = CO2CMe3]. Thus, (R)-I [R = {4-(phenylamino)quinazolin-2-yl}methyl; (β-NH2)] was prepared from 8-bromo-3-methylxamthine via regioselective N-alkylation with 1-bromo-2-butyne in DMF containing Hunig's base, amination with (R)-3-(Boc-amino)piperidine in DMSO containing K2CO3, N-alkylation with 2-(chloromethyl)-4-(phenylamino)quinazoline in DMF containing Cs2CO3, and dealkoxycarbonylation in CH2Cl2 with HCl in isopropanol. The enzyme inhibiting activity of I [R = {4-(phenylamino)quinazolin-2-yl}methyl] was determined [IC50 = 6 nM]. Drug dosage forms (dragees, tablets, hard gelatins, suppositories, suspensions, ampuls) containing I were prepared

IT 67-47-0, 5-(Hydroxymethyl)-2-furancarboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methanesulfonyl chloride; preparation of 8-[3-aminopiperidin-1-yl]xanthines and their use as DPP-IV inhibitors)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 41 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:673292 CAPLUS

DOCUMENT NUMBER: 143:172866

TITLE: Preparation of isothiazole dioxides as CXC- and CC-chemokine receptor ligands

INVENTOR(S): Taveras, Arthur G.; Zheng, Junying; Biju, Purakkattle J.; Yu, Younong; Chao, Jianhua; Fine, Jay; Lundell, Daniel; Priestley, Tony; Reggiani, Angelo; Merritt, J. Robert; Baldwin, John J.; Lai, Gaifa; Wu, Minglang

PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia Drug Discovery, Inc.

SOURCE: PCT Int. Appl., 427 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068460	A1	20050728	WO 2004-US42720	20041220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2550540	A1	20050728	CA 2004-2550540	20041220
US 2006025453	A1	20060202	US 2004-17505	20041220
EP 1697354	A1	20060906	EP 2004-814856	20041220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
CN 1918156	A	20070221	CN 2004-80041794	20041220
JP 2007515489	T	20070614	JP 2006-547206	20041220
MX 2006PA07205	A	20060831	MX 2006-PA7205	20060622
PRIORITY APPLN. INFO.:			US 2003-531693P P	20031222
			WO 2004-US42720 W	20041220

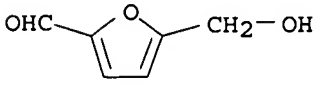
OTHER SOURCE(S): MARPAT 143:172866
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed are novel compds. I [D, E = N, CR50; provided that D and E are not the same (one is N and the other is CR50); R50 = H, CF3, CN, etc.; A = (hetero)aryl, (hetero)arylalkyl; B = (hetero)aryl] and the pharmaceutically acceptable salts and solvates thereof. Also disclosed is a method of treating a chemokine mediated diseases, such as, cancer, angiogenesis, angiogenic ocular diseases, pulmonary diseases, multiple sclerosis, rheumatoid arthritis, osteoarthritis, stroke and cardiac reperfusion injury, pain (e.g., acute pain, acute and chronic inflammatory pain, and neuropathic pain) using a compound I. Although the methods of preparation are not claimed, hundreds of example prepns. and/or characterization data are included. For example, II was prepared in 68% yield from the isothiazoledioxide III and the amine IV.pTSA (preparation of reactants given). Antagonist activities of some examples of I towards CXCR1, CXCR2 and CCR7 are given.

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isothiazole dioxides as CXC- and CC-chemokine receptor ligands)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

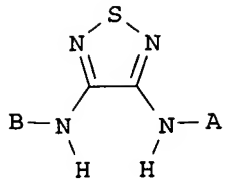


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

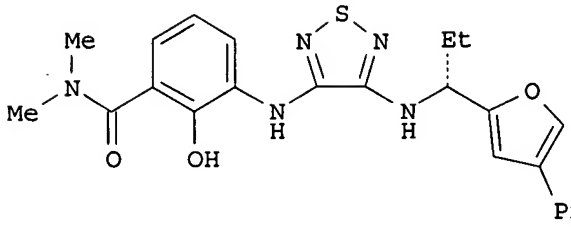
L3 ANSWER 42 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:638859 CAPLUS
DOCUMENT NUMBER: 143:153384
TITLE: Preparation of diaminothiadiazoles as CXC- and CC-chemokine receptor ligands
INVENTOR(S): Biju, Purakkattle J.; Taveras, Arthur G.; Yu, Younong; Zheng, Junying; Chao, Jianhua; Aki, Cynthia J.; Fine, Jay; Lundell, Daniel; Priestley, Tony; Reggiani, Angelo; Merritt, J. Robert; Baldwin, John J.
PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia Drug Discovery, Inc.
SOURCE: PCT Int. Appl., 593 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005066147	A1	20050721	WO 2004-US42060		20041216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2550189	A1	20050721	CA 2004-2550189		20041216
EP 1694659	A1	20060830	EP 2004-814266		20041216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU					
US 2006223864	A1	20061005	US 2004-13753		20041216
CN 1918138	A	20070221	CN 2004-80041695		20041216
JP 2007514746	T	20070607	JP 2006-545364		20041216
MX 2006PA07076	A	20060831	MX 2006-PA7076		20060619
PRIORITY APPLN. INFO.:			US 2003-531311P	P	20031219
			US 2003-531713P	P	20031222
			WO 2004-US42060	W	20041216

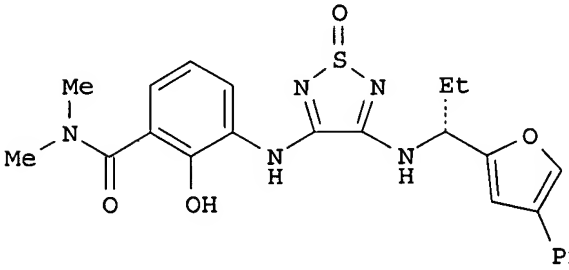
OTHER SOURCE(S): MARPAT 143:153384
GI



I



Pr-i II



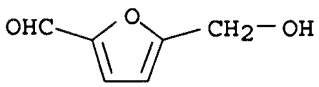
Pr-i III

AB Disclosed are diaminothiadiazoles I [A = (hetero)aryl, (hetero)arylmethyl (substituted at CH2), etc.; B = (hetero)aryl] and the pharmaceutically acceptable salts and solvates thereof. Also disclosed is a method of treating a chemokine mediated diseases, such as, cancer, angiogenesis, angiogenic ocular diseases, pulmonary diseases, multiple sclerosis, rheumatoid arthritis, osteoarthritis, stroke and ischemia reperfusion injury, acute pain, acute and chronic inflammatory pain, and neuropathic pain using I. Although the methods of preparation are not claimed, hundreds of example prepns. and/or characterization data are included. For example, II was prepared in 43% yield from its monooxide III (preparation given). Antagonist activities of some examples of I towards CXCR1, CXCR2 and CCR7 are given.

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of diaminothiadiazoles as CXC- and CC-chemokine receptor ligands)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 43 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:504449 CAPLUS

DOCUMENT NUMBER: 143:83400

TITLE: Plant extract and compound for treating endotoxin blood disease, and its extraction method and application

10/531,714

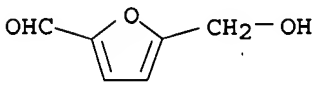
INVENTOR(S): Pu, Wenying
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp. given
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1520837	A	20040818	CN 2003-102065	20030130
CN 1704050	A	20051207	CN 2005-10075356	20030130
CN 1704066	A	20051207	CN 2005-10075357	20030130
CN 1704401	A	20051207	CN 2005-10075358	20030130
PRIORITY APPLN. INFO.:			CN 2003-102065 A3	20030130

AB The present invention relates to the effective part of isatis root for treating endotoxemia. The effective part contains four kinds of compds.: furfuraldehyde compound with main component 5-methylol furfuraldehyde; lignin compound with main component isolariciresinol; indole compound with main component 1-N-methoxy-2-oxy-indole-3-acetamide; and organic acid compound with main components o-aminobenzoic acid, salicylic acid, benzoic acid, syringic acid and long-chain fatty acid containing hydroxy group and double bond. The effective part of the present invention and its compound components have excellent effect of resisting endotoxemia.

IT 67-47-0
RL: NPO (Natural product occurrence); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(plant extract and compound for treating endotoxin blood disease, and its extraction method and application)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 44 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:447252 CAPLUS
DOCUMENT NUMBER: 142:469168
TITLE: Fractions of shiitake (Lentinula edodes) mycelial extracts containing polyphenols, their preparation, and their uses for pharmaceuticals and foods
INVENTOR(S): Oda, Machiko; Mitsunaga, Toru; Yagi, Kiyohito; Kawase, Masaya; Nakamura, Risa; Yamaguchi, Yoshihiro; Tamesada, Makoto
PATENT ASSIGNEE(S): Kobayashi Pharmaceutical Co., Ltd., Japan; Nagaoka, Hitoshi
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

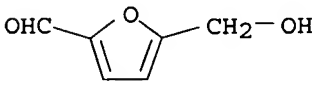
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005132812	A	20050526	JP 2004-23417	20040130
PRIORITY APPLN. INFO.:			JP 2003-349998 A	20031008

AB The fractions of shiitake mycelial exts. containing polyphenols are manufactured by adding EtOH-containing solns. to shiitake mycelial exts., and subjecting the resulting soluble fractions to gel filtration chromatog., elution with water, and elution with MeOH-containing solns. The fractions are useful for antioxidants, pharmaceutical compns. for prevention and/or treatment of liver diseases, oral compns., foods, beverages, and biol. membrane protectants. Shiitake mycelial extract was treated with aqueous 50% EtOH solution, the EtOH-soluble fraction was applied on a gel filtration chromatog. column packed with Sephadex LH-20, and eluted with H2O and then with MeOH to give an EtOH-soluble MeOH fraction (ES-Me fraction) containing carbohydrates 9.48, proteins 76.79, and polyphenols 13.73 weight%. The ES-Me fraction (at 0.125 mg/mL) showed 100% inhibition of lipid peroxidn. in rat liver microsome. The ES-Me fraction was fractionated by open-column chromatog. (LH-20gel) to give 122 fractions. A fraction having the highest DPPH radical-scavenging activity contained syringic acid, vanillic acid, protocatechuic acid (3,4-dihydroxybenzoic acid), and Me gallate, and a fraction having the 2nd highest activity contained 5-hydroxymethylfurfural.

IT 67-47-0P, 5-Hydroxymethylfurfural
RL: FFD (Food or feed use); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of antioxidant shiitake (Lentinula edodes) mycelial extract fractions containing polyphenols for pharmaceuticals and foods)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 45 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:443243 CAPLUS

DOCUMENT NUMBER: 142:469335

TITLE: 5-hydroxymethylfurfural pharmaceuticals for prevention of degenerative nervous system disease and cognition disorders

INVENTOR(S): Li, Lin; Zhang, Lan; Chu, Jin

PATENT ASSIGNEE(S): Xuanwu Hospital of Capital University of Medical Science, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp. given
CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

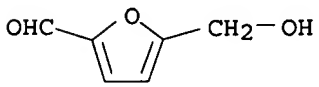
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1504188	A	20040616	CN 2002-153732	20021203

PRIORITY APPLN. INFO.: CN 2002-153732 20021203

AB The invention relates to the use of 5-hydroxymethyl-2-furfural or its derivative in preparing pharmaceuticals and health products for preventing or treating nerve retrogression diseases or cognition impairment.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxymethylfurfural pharmaceuticals for prevention of

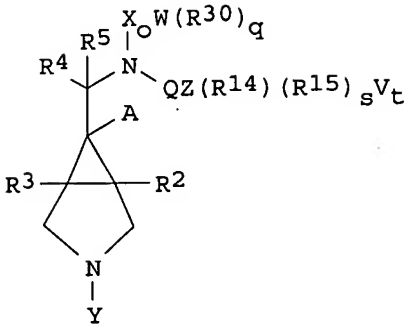
degenerative nervous system disease and cognition disorders)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 46 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:369236 CAPLUS
DOCUMENT NUMBER: 142:430124
TITLE: Preparation of 3-azabicyclo[3.1.0]hexane derivatives as glycine transporter inhibitors for enhancing cognition and treating psychoses
INVENTOR(S): Lowe, John A.; Mchardy, Stan
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005037216	A2	20050428	WO 2004-US34083	20041014
WO 2005037216	A3	20050804		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004281794	A1	20050428	AU 2004-281794	20041014
CA 2542279	A1	20050428	CA 2004-2542279	20041014
US 2005096375	A1	20050505	US 2004-964931	20041014
EP 1680124	A2	20060719	EP 2004-795270	20041014
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
CN 1867338	A	20061122	CN 2004-80030044	20041014
BR 2004015356	A	20061212	BR 2004-15356	20041014
JP 2007508374	T	20070405	JP 2006-535348	20041014
IN 2006DN01426	A	20070810	IN 2006-DN1426	20060316
MX 2006PA04279	A	20060628	MX 2006-PA4279	20060417
NO 2006002193	A	20060515	NO 2006-2193	20060515
PRIORITY APPLN. INFO.:			US 2003-510846P P	20031014
			WO 2004-US34083 W	20041014

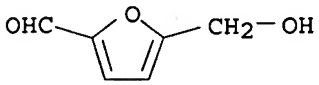
OTHER SOURCE(S): CASREACT 142:430124; MARPAT 142:430124
GI



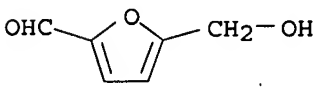
I

AB The present invention relates to substituted bicyclic [3.1.0]amines (shown as I; variables defined below; e.g. thiophene-2-carboxylic acid N-[(3-benzyl-3-azabicyclo[3.1.0]hex-6-yl)methyl]-N-[3-fluoro-4-(morpholin-4-yl)phenyl]amide (II)), their pharmaceutically acceptable salts, pharmaceutical compns. thereof, and their use (no data) for the enhancement of cognition and the treatment of the pos. and neg. symptoms of schizophrenia and other psychoses in mammals, including humans. Compds. of the invention analyzed by an assay for their activity in inhibiting glycine reuptake in synaptosomes have IC50 values more potent than 10 μM; no values for individual examples of I are given. For I: y = H or (R100)k-R1-(R6)m; k = 0-1; l = 0-3; m = 1-3; n = 0-4; o = 0-1; p = 0-3; q = 0-4; r = 1-2; s = 0-4; t = 0-1; u = 1-3; v = 1-3; R100 is -CH2-, -CH(C1-C3)alkyl-, -C(O)- or -SO2-. R1 is -(C1-C6)alkyl, -(C3-C8)cycloalkyl, -(4 to 7 membered) heterocycloalkyl, -(CH2)l-(C6-C10 aryl) or -(5 to 10 membered) heteroaryl, or (5 to 10 membered) tetrahydroheteroaryl; each R6 = H, halo, -(C1-C6) alkyl-B, (C1-C7) alkoxy-D, (C2-C4)alkenoxy, (C1-C6)alkyl-OH, -OH, CN, -NO2, -CR7R8R9, -NR20R21, -NHCOalkyl(C1-C3), NHSO2alkyl(C1-C3), C(O)OR22, -R23C(O)OR22, -C(O)NH2, phenyl-E, phenoxy-F, morpholine, -NR20R21, aryl, heteroaryl, -SR24, and -SO2R25; B and D = H, OH, Ph, di-Ph or trifluoro; E and F = H, alkyl, or halo. R2 and R3 = H or (C1-C3)alkyl; R4 and R5 = H or (C1-C3) alkyl; or R4 and R5 taken together form a double bond to an O to form (C:O), or R4 and R5 are connected with 2 to 4 C atoms to form a 3-5 member carbocyclic ring; A is H or (C1-C3)alkyl-(R28)n; R28 = (C1-C3)alkoxy, -OH, -NR12R13 or -NHC(O)(C1-C4)alkyl; X is a bond, -CH2(R29)p, -C(O) or -SO2; R29 is -(C1-C3)alkyl; W is alkyl, -(C3-C6)cycloalkyl, -(3 to 7 membered) heterocycloalkyl, -(3 to 7 membered) heterocycloalkyl with 1 or 2 C:O groups, Ph, or -(5 to 7 member) heteroaryl or heterocyclic; R30 is -(C1-C4)alkyl, -(C1-C3)alkoxy, CN, -F, -Cl, -Br, -I, -NR18R19, -NHC(O)R18, -SCH3 or -C(O)CH3. Q is a bond, -CH(R31)r, -C(O) or SO2; R31 = H or (C1-C3)alkyl; Z is -(C1-C8)alkyl, -(C3-C8)cycloalkyl, -(4 to 8 member) heterocycloalkyl, Ph or -(5 to 7 membered) heteroaryl or heterocyclic; R14 is F, Cl, Br, I, V, H, -NR16R17, -OR16, -C(O)NR16R17, -(SO2)NR16R17, or NR32C:O-R33; R15 is -(C1-C3)alkyl, -(C1-C3)alkoxy, -F, -Br, -Cl, -I -OH or CN; V is -(C3-C8)cycloalkyl, -(C1-C5)alkyl, (5 to 7 membered) heterocycloalkyl, (5 to 7 membered)heterocycloalkyl substituted with 1 or 2 C:O groups or 1, 2, or 3-(C1-C5)alkyl groups; addnl. details are given in the claims. Although the methods of preparation are not claimed, 6 example prepns. are included. For example, II was prepared in 5 steps starting from (3-azabicyclo[3.1.0]hex-6-yl)methanol hydrochloride and involving 6-hydroxymethyl-3-azabicyclo[3.1.0]hexane-3-carboxylic acid tert-Bu ester, 6-[[[3-fluoro-4-(morpholin-4-yl)phenyl]amino]methyl]-3-azabicyclo[3.1.0]hexane-3-carboxylic acid tert-Bu ester, 6-[[[3-fluoro-4-(morpholin-4-yl)phenyl][(thien-2-yl)carbonyl]amino]methyl]-3-azabicyclo[3.1.0]hexane-3-carboxylic acid tert-Bu ester and thiophene-2-carboxylic acid N-[(3-azabicyclo[3.1.0]hex-6-yl)methyl]-N-[3-fluoro-4-(morpholin-4-yl)phenyl]amide trifluoroacetate as intermediates.

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 3-azabicyclo[3.1.0]hexane derivs. as glycine transporter inhibitors)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 47 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:119536 CAPLUS
DOCUMENT NUMBER: 143:77296
TITLE: Changes of the constituents in the Rehmanniae Radix Preparata during processing
AUTHOR(S): Lee, Chong-Ki; Seo, Jung-Mi
CORPORATE SOURCE: Dept. of Medical Management, Chodang University, Jeonnam, 534-701, S. Korea
SOURCE: Han'guk Sikp'um Yongyang Kwahak Hoechi (2004), 33(10), 1748-1752
CODEN: HSYHFB; ISSN: 1226-3311
PUBLISHER: Korean Society of Food Science and Nutrition
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB This study was performed to obtain the good processing in the Rehmanniae Radix Preparata. The contents of the Rehmanniae Radix and the Rehmanniae Radix Preparata produced through different processes were analyzed in the 5-hydroxymethyl-2-furaldehyde (5-HMF), sugar, total nitrogen, crude lipid and ash. 5-HMF was not detected in the Rehmanniae Radix, but detected in the Rehmanniae Radix Preparata. 5-HMF content was increased gradually with processing times (1-9 times) and increased expressly in the Rehmanniae Radix Preparata steamed for 7 times. Sucrose, fructose and glucose were contained in the Rehmanniae Radix, but sucrose was not detected and fructose and glucose were increased largely in the Rehmanniae Radix Preparata steamed for 1 time. Fructose and glucose were decreased gradually with processing times (2-9 times), but the gap of decrease was insignificant. Total nitrogen was changed slightly and crude lipid was decreased slowly with processing times. The ash was suitable to KPVIII rules (less than 6.0%). From this anal. we found out the content of 5-HMF from Rehmanniae Radix Preparata steamed more than 7 times was suitable to KPVIII rules (more than 0.1%).
IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Rehmanniae Radix Preparata constituent during processing)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



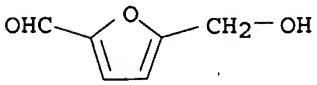
L3 ANSWER 48 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:997434 CAPLUS
DOCUMENT NUMBER: 142:232855
TITLE: Hypotensive and toxicological study of citric acid and other constituents from Tagetes patula roots

AUTHOR(S): Saleem, Rubeena; Ahmad, Mohammad; Naz, Aneela; Siddiqui, Humaira; Ahmad, Syed Iqbal; Faizi, Shaheen
CORPORATE SOURCE: Dr. HMI Institute of Pharmacology and Herbal Sciences, Hamdard University, Karachi, 74600, Pak.
SOURCE: Archives of Pharmacal Research (2004), 27(10), 1037-1042
CODEN: APHRDQ; ISSN: 0253-6269
PUBLISHER: Pharmaceutical Society of Korea
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Study of the effects of the methanolic extract of Tagetes patula roots on blood pressure led to the isolation of well known citric (1) and malic acid (7) as hypotensive, and pyridine hydrochloride (4) as hypertensive constituents of the plant along with a new constituent, 2-hydroxy, 5-hydroxymethyl furan (9). Citric acid and malic acid caused 71% and 43% fall in Mean Arterial Blood Pressure (MABP) of rats at the doses of 15 mg/kg and 30mg/kg resp. while pyridine hydrochloride produced 34% rise in the MABP of rats at the dose of 30mg/kg. LD50 and LD100 of citric acid in mice have been determined as 545 mg/kg and 1000 mg/kg, resp.

IT 67-47-0P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hypotensive and toxicol. study of citric acid and other constituents from Tagetes patula roots)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

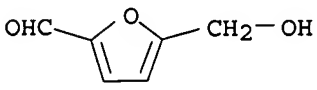
L3 ANSWER 49 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:976915 CAPLUS
DOCUMENT NUMBER: 142:140739
TITLE: Flash gas chromatography for analysis of volatile compounds from Houttuynia cordata Thunb
AUTHOR(S): Qi, Meiling; Ge, Xiaoxia; Liang, Minmin; Fu, Ruonong
CORPORATE SOURCE: Department of Chemistry, School of Science, Beijing Institute of Technology, Zhongguancun, Beijing, 100081, Peop. Rep. China
SOURCE: Analytica Chimica Acta (2004), 527(1), 69-72
CODEN: ACACAM; ISSN: 0003-2670
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This paper describes a novel anal. method, flash gas chromatog. (FGC), for the anal. of volatile compds. from Houttuynia cordata Thunb. This method does not demand time-consuming extraction process. The ground powder of the plant material can be directly applied for the anal. and only a few milligrams of sample are needed. The identification of the components was made by FGC-MS. The results between FGC and ordinary GC (using the extracted essential oil as sample) were compared and found that FGC offered a similar number and types of the components with GC. FGC is a novel and feasible method for the quality control of traditional Chinese medicines (TCMs).

IT 67-47-0, 5-(Hydroxymethyl)-2-furancarboxaldehyde
RL: ANT (Analyte); ANST (Analytical study)

(flash gas chromatog. for anal. of volatile compds. from Houttuynia cordata)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

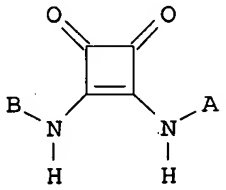


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 50 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:451668 CAPLUS
DOCUMENT NUMBER: 141:23213
TITLE: Preparation of 3,4-di-substituted cyclobutene-1,2-diones as CXC-chemokine receptor ligands
INVENTOR(S): Taveras, Arthur G.; Aki, Cynthia J.; Bond, Richard W.; Chao, Jianping; Dwyer, Michael; Ferreira, Johan A.; Chao, Jianhua; Yu, Younong; Baldwin, John J.; Kaiser, Bernd; Li, Ge; Merritt, J. Robert; Biju, Purakkattle J.; Nelson, Kingsley H.; Rokosz, Laura L.
PATENT ASSIGNEE(S): Schering Corporation, USA
SOURCE: U.S. Pat. Appl. Publ., 331 pp., Cont.-in-part of U.S. Ser. No. 208,412.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004106794	A1	20040603	US 2002-241326	20020911
CN 1990457	A	20070704	CN 2006-10137409	20020415
EP 1818325	A2	20070815	EP 2007-10711	20020415
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, LT, LV, MK, RO, SI				
US 2004097547	A1	20040520	US 2002-208412	20020730
CA 2496676	A1	20040205	CA 2003-2496676	20030730
WO 2004011418	A1	20040205	WO 2003-US23785	20030730
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NI, NO, NZ, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003259302	A1	20040216	AU 2003-259302	20030730
US 2004147559	A1	20040729	US 2003-630258	20030730
US 7132445	B2	20061107		
EP 1539678	A1	20050615	EP 2003-772075	20030730
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003013109	A	20050621	BR 2003-13109	20030730
JP 2005534684	T	20051117	JP 2004-524185	20030730
CN 1723194	A	20060118	CN 2003-823160	20030730
MX 2005PA01274	A	20050908	MX 2005-PA1274	20050131
NO 2005001036	A	20050420	NO 2005-1036	20050225

US 2007021494 A1 20070125 US 2006-500739 20060808
PRIORITY APPLN. INFO.: US 2001-284026P P 20010416
US 2002-122841 A2 20020415
US 2002-208412 A2 20020730
CN 2002-811979 A3 20020415
EP 2002-739172 A3 20020415
US 2002-241326 A 20020911
US 2003-630258 A3 20030730
WO 2003-US23785 W 20030730
OTHER SOURCE(S): MARPAT 141:23213
GI



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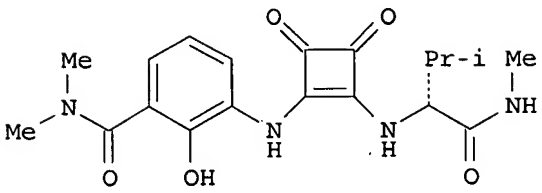
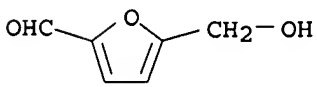


II

AB Title compds. I [A = (un)substituted heterocycle, heterocyclylalkyl, heteroaryl, heteroarylalkyl, cycloalkyl, etc.; B = (un)substituted aryl, heteroaryl, heterocycle, heteroarylarene, etc.], or a pharmaceutically acceptable salt or solvate thereof, are prepared and disclosed as cxc-chemokine receptor ligands. Thus, II was prepared by substitution of (dimethylaminocarbonylhydroxyphenylamino)(ethoxy)cyclobute nedione [preparation given] with (R)-2-amino-N,3-dimethylbutanamide monohydrochloride [preparation given]. Compds. of the invention demonstrated an IC50 value of < 20 μM in CXCR1 SPA assay and < 5 μM in CXCR2 SPA assay. I are useful for the treatment of chemokine-mediated diseases such as acute and chronic inflammatory disorders and cancer.

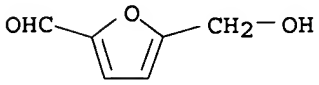
IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective preparation of disubstituted cyclobutenediones as cxc-chemokine receptor ligands)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 51 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:448180 CAPLUS
DOCUMENT NUMBER: 141:199446
TITLE: Phenolic and furan type compounds isolated from Gastrodia elata and their anti-platelet effects
AUTHOR(S): Pyo, Mi Kyung; Jin, Jing Ling; Koo, Yean Kyoung;

Yun-Choi, Hye Sook
CORPORATE SOURCE: Natural Products Research Institute, Seoul National University, Seoul, 110-460, S. Korea
SOURCE: Archives of Pharmacal Research (2004), 27(4), 381-385
CODEN: APHRDQ; ISSN: 0253-6269
PUBLISHER: Pharmaceutical Society of Korea
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Nine phenolic (1.apprx.9) and two furan type (10, 11) compds., were isolated from the methanolic extract of the tuber of Gastrodia elata Blume (Orchidaceae) in the course of continuing search for platelet anti-aggregating plant components. Compound 1 was identified as 4,4'-dihydroxybenzyl sulfone, a novel compound for the best of our knowledge. Compound 10, 5-hydroxymethyl-2-furancarboxaldehyde, was isolated for the first time from this plant. Compound 1 (IC50; 83 μM) was about four times more inhibitory to U46619 induced aggregation than ASA (IC50; 340 μM). Compound 9, 4,4'-dihydroxy-dibenzylether, (IC50; 5 μM, 3 μM and 33 μM, resp.) was 10-80 fold more potent than ASA (IC50; 420 μM, 53 μM and 340 μM resp.) to collagen, epinephrine and U46619 induced aggregation, although it is less active than ASA to AA induced aggregation.
IT 67-47-0P, 5-Hydroxymethyl-2-furancarboxaldehyde
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(antiplatelet activity of phenolic and furan type compds. isolated from Gastrodia elata)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 52 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:414638 CAPLUS
DOCUMENT NUMBER: 140:406571
TITLE: Preparation of 3,4-di-substituted cyclobutene-1,2-diones as CXC-chemokine receptor ligands
INVENTOR(S): Taveras, Arthur G.; Aki, Cynthia J.; Bond, Richard W.; Chao, Jianping; Dwyer, Michael; Ferreira, Johan A.; Chao, Jianhua; Yu, Younong; Baldwin, John J.; Kaiser, Bernd; Li, Ge; Merritt, J. Robert; Nelson, Kingsley H.; Rokosz, Laura L.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 308 pp., Cont.-in-part of U.S. Ser. No. 122,841.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004097547	A1	20040520	US 2002-208412	20020730
CN 1990457	A	20070704	CN 2006-10137409	20020415
EP 1818325	A2	20070815	EP 2007-10711	20020415

	R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, LT, LV, MK, RO, SI					
US 2004106794		A1	20040603	US 2002-241326		20020911
CA 2496676		A1	20040205	CA 2003-2496676		20030730
WO 2004011418		A1	20040205	WO 2003-US23785		20030730
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NI, NO, NZ, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2003259302		A1	20040216	AU 2003-259302		20030730
US 2004147559		A1	20040729	US 2003-630258		20030730
US 7132445		B2	20061107			
EP 1539678		A1	20050615	EP 2003-772075		20030730
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
BR 2003013109		A	20050621	BR 2003-13109		20030730
JP 2005534684		T	20051117	JP 2004-524185		20030730
CN 1723194		A	20060118	CN 2003-823160		20030730
MX 2005PA01274		A	20050908	MX 2005-PA1274		20050131
IN 2005CN00263		A	20070406	IN 2005-CN263		20050224
NO 2005001036		A	20050420	NO 2005-1036		20050225
US 2007021494		A1	20070125	US 2006-500739		20060808
PRIORITY APPLN. INFO.:				US 2001-284026P	P	20010416
				US 2002-122841	A2	20020415
				CN 2002-811979	A3	20020415
				EP 2002-739172	A3	20020415
				US 2002-208412	A2	20020730
				US 2002-241326	A	20020911
				US 2003-630258	A3	20030730
				WO 2003-US23785	W	20030730

OTHER SOURCE(S): MARPAT 140:406571

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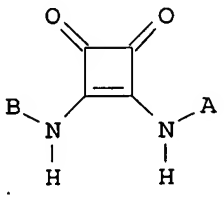

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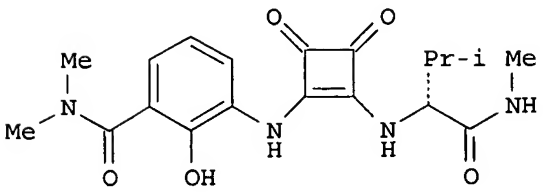


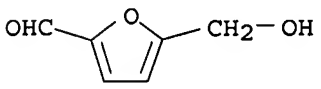
II

AB Title compds. I [A = (un)substituted heterocycle, heterocyclealkyl, heteroaryl, heteroarylalkyl, cycloalkyl, etc.; B = (un)substituted aryl, heteroaryl, heterocycle, heteroarylarene, etc.], or a pharmaceutically acceptable salt or solvate thereof, are prepared and disclosed as cxc-chemokine receptor ligands. Thus, II was prepared by

substitution of (dimethylaminocarbonylhydroxyphenylamino)(ethoxy)cyclobute nedione [preparation given] with (R)-2-amino-N,3-dimethylbutanamide monohydrochloride [preparation given]. Compds. of the invention demonstrated an IC50 value of < 20 μM in CXCR1 SPA assay and < 5 μM in CXCR2 SPA assay. I are useful for the treatment of chemokine-mediated diseases such as acute and chronic inflammatory disorders and cancer.

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective preparation of disubstituted cyclobutenediones as cxc-chemokine receptor ligands)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 53 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:370917 CAPLUS
DOCUMENT NUMBER: 140:391189
TITLE: Preparation of furan derivatives for treatment of osteoporosis
INVENTOR(S): Kim, Jung-Keun; Kim, Se-Won; Oh, Kwi-Ok; Ko, Seon Yle; Kim, Jong Yeo; Lee, Byung-Eui; Kim, Bum Tae; Lee, Yeon Soo; Min, Yong Ki; Park, No Kyun
PATENT ASSIGNEE(S): Oscotec Inc., S. Korea; Korea Research Institute of Chemical Technology
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004037804	A1	20040506	WO 2003-KR2231		20031022
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
KR 2004035559	A	20040429	KR 2003-72536		20031017
AU 2003273096	A1	20040513	AU 2003-273096		20031022
JP 2006515276	T	20060525	JP 2004-546535		20031022
US 2006004088	A1	20060105	US 2005-531714		20050418
KR 2005080452	A	20050812	KR 2005-56454		20050628
PRIORITY APPLN. INFO.:			KR 2002-64670	A	20021022
			KR 2003-72536	A	20031017
			WO 2003-KR2231	W	20031022

OTHER SOURCE(S): MARPAT 140:391189
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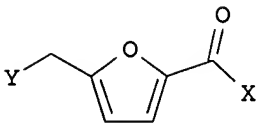

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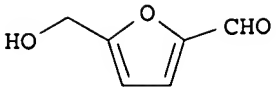


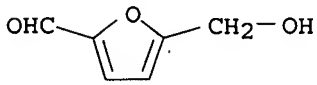
II

AB The title compds. I [wherein X = H, (un)substituted OH, or NH2; Y = SC(=NH)NH2, (un)substituted OH, or NH2] or pharmaceutically acceptable salts thereof are prepd for the treatment of bone disease. For example, the compound II was obtained by extraction from a plant rehmannia glutinosa libosch. I showed strong effect on bone proliferation with the side effect reduced. I also showed high inhibition rate against osteoclast formation at different concns. Formulations containing I as an active ingredient were also described.

IT 67-47-0P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of furan derivs. for treatment of osteoporosis)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 54 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:333705 CAPLUS

DOCUMENT NUMBER: 140:357355

TITLE: Preparation of diaminothiadiazole dioxides and monoxides as CXC- and CC-chemokine receptor ligands

INVENTOR(S): Taveras, Arthur G.; Chao, Jianhua; Biju, Purakkattle J.; Yu, Younong; Fine, Jay S.; Hipkin, William; Aki, Cynthia J.; Merritt, J. Robert; Li, Ge; Baldwin, John J.; Lai, Gaifa; Wu, Minglang; Hecker, Evan A.

PATENT ASSIGNEE(S): Pharmacopeia, Inc., USA; Schering Corporation; Pharmacopeia Drug Discovery, Inc.

SOURCE: PCT Int. Appl., 540 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004033440	A1	20040422	WO 2003-US31707	20031007

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NI, NO, NZ, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2501535	A1	20040422	CA 2003-2501535	20031007
AU 2003288922	A1	20040504	AU 2003-288922	20031007
US 2004186142	A1	20040923	US 2003-680393	20031007
EP 1551818	A1	20050713	EP 2003-781311	20031007
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1720240	A	20060111	CN 2003-80105139	20031007
JP 2006508079	T	20060309	JP 2004-543449	20031007
US 2007264230	A1	20071115	US 2007-651128	20070109
PRIORITY APPLN. INFO.:			US 2002-417371P	P 20021009
			US 2003-680393	B1 20031007
			WO 2003-US31707	W 20031007

OTHER SOURCE(S): MARPAT 140:357355

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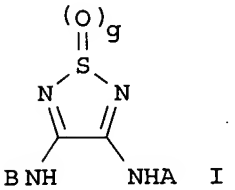

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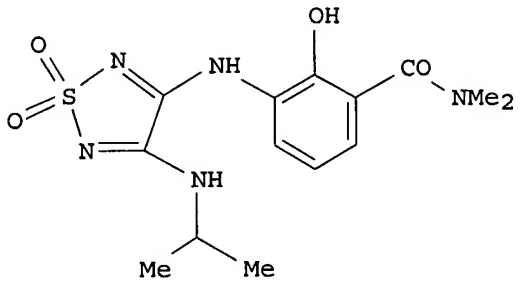


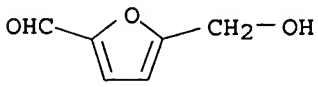
II

AB Disclosed are diaminothiadiazole mono- and dioxides (shown as I; e.g. II) and the pharmaceutically acceptable salts and solvates thereof. Examples of substituent A include heteroaryl, aryl, heterocycloalkyl, cycloalkyl, aryl, alkynyl, alkenyl, aminoalkyl, alkyl or amino; examples of substituent B include aryl and heteroaryl; g = 1, 2. Also disclosed is a method of treating a chemokine mediated diseases, such as, cancer, angiogenesis, angiogenic ocular diseases, pulmonary diseases, multiple sclerosis, rheumatoid arthritis, osteoarthritis, stroke and cardiac reperfusion injury, acute pain, acute and chronic inflammatory pain, and neuropathic pain using I. Although the methods of preparation are not claimed, hundreds of example prepns. and/or characterization data are included. For example, II was prepared in 31% yield from the 4-methoxy analog and isopropylamine in the presence of DIEA in MeOH; the 4-methoxy analog was prepared from the dimethoxy analog and N,N-dimethyl-3-amino-2-hydroxybenzamide in 99% crude yield. Antagonist activities of some examples of I towards CXCR1, CXCR2 and CCR7 are given.

IT 67-47-0, 5-Hydroxymethylfuran-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of diaminothiadiazole dioxides and monoxides as CXC- and CC-chemokine receptor ligands)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 55 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:191117 CAPLUS
DOCUMENT NUMBER: 140:236007
TITLE: Preparation of indolopyrrolocarbazole derivatives having glucopyranosyl group and antitumor agents containing them
INVENTOR(S): Kojiri, Katsuhisa; Kondo, Hisao; Arakawa, Hiroharu; Ohkubo, Mitsuru; Suda, Hiroyuki
PATENT ASSIGNEE(S): Banyu Pharmaceutical Co., Ltd., Japan
SOURCE: U.S., 17 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6703373	B1	20040309	US 2002-70825	20020311
WO 2004083228	A1	20040930	WO 1999-JP4911	19990910
W: US				
PRIORITY APPLN. INFO.:			WO 1999-JP4911 W	19990910
OTHER SOURCE(S):	MARPAT 140:236007			

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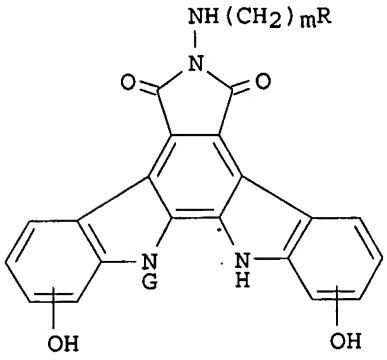
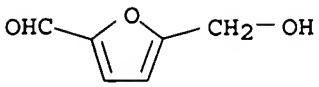


I

AB The derivs. I (R = Ph, naphthyl, pyridyl, furyl, thienyl, which is substituted with 1-2 OH, lower alkoxy, lower hydroxyalkyl, or lower hydroxyalkenyl; if R has a lower alkoxy, then R is also has the other substituent; m = 1-3; G = β-D-glucopyranosyl; 2 OH groups are on the 1- and 11- or 2- and 10-positions of the indolopyrrolocarbazole ring) or their pharmaceutically acceptable salts are prepared The antitumor agents contain I or the salts. 2,10-I [(CH2)mR = CH2C6H3(OH)2-3,5] (preparation given) inhibited growth of human gastric cancer MX-1 cells s.c. transplanted into nude mice. The cancer treated is gastric cancer, colon cancer, lung cancer or breast cancer. Growth inhibition activity on human gastric cancer cells, human colon cancer cells and human lung cancer cells.

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of glucopyranosylindolopyrrolocarbazole derivs. as antitumor agents)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

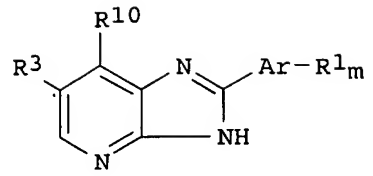


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 56 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:162689 CAPLUS
DOCUMENT NUMBER: 140:199327
TITLE: Preparation of imidazopyridines as Itk kinase inhibitors for use against asthma and allergic rhinitis
INVENTOR(S): Johansson, Henrik; Lawitz, Karolina; Nikitidis, Grigorios; Sjoe, Peter; Storm, Peter
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 170 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004016611	A1	20040226	WO 2003-SE1279		20030813
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2495511	A1	20040226	CA 2003-2495511		20030813
AU 2003251272	A1	20040303	AU 2003-251272		20030813
EP 1539759	A1	20050615	EP 2003-788216		20030813
EP 1539759	B1	20070815			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
BR 2003013461	A	20050705	BR 2003-13461		20030813
CN 1684964	A	20051019	CN 2003-823193		20030813
JP 2006503010	T	20060126	JP 2004-529004		20030813
NZ 538156	A	20060929	NZ 2003-538156		20030813
AT 370138	T	20070915	AT 2003-788216		20030813
ZA 2005000887	A	20060222	ZA 2005-887		20050131
MX 2005PA01581	A	20050425	MX 2005-PA1581		20050209
US 2005261333	A1	20051124	US 2005-524204		20050210
NO 2005001265	A	20050512	NO 2005-1265		20050311
PRIORITY APPLN. INFO.:			SE 2002-2462	A	20020814
			WO 2003-SE1279	W	20030813

OTHER SOURCE(S): MARPAT 140:199327
GI



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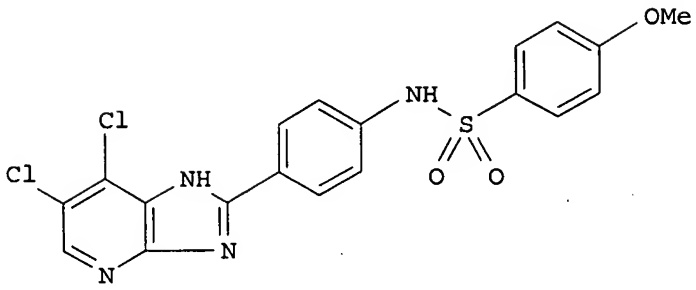


II

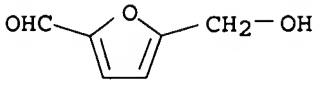
AB The use of imidazopyridines (shown as I; variables defined below; e.g. II trifluoroacetate) and pharmaceutically acceptable salts thereof in the manufacture of a medicament for the treatment or prophylaxis of diseases or conditions in which inhibition of kinase Itk activity is beneficial is disclosed. Certain novel compds. I, together with processes for their preparation, compns. containing them and their use in therapy are also disclosed.

For I: R3 = halogen, CN, C1-3-alkyl or C1-3-alkoxy; Ar = Ph, a 5-6-membered heteroarom. ring or an indole ring, said heteroarom. ring incorporating 1 to 3 O, N and S; R1 = H, halogen, CN, C1-6-alkyl, NO2, SO2Me, C1-6-alkynyl, CH2OH, OR2, (CH2)nNR4R5 or Ph (un)substituted by NH2; m = 1-2 and when m = 2, each R1 may be selected independently; n = 0 or 1; R10 = H, halogen, CN, C1-4-alkyl, C1-4-alkoxy, NR14R15 or a group -X-Y-Z (X = O, S, a bond or NR16 wherein R16 = H or C1-4-alkyl; Y = C1-4-alkyl or a bond; Z = Ph, naphthyl or a 5- or 6-membered heteroarom. ring, a 5- or 6-membered saturated heterocyclic ring containing 1-2 heteroatoms = O, N and S, or C3-6-cycloalkyl); addnl. details are given in the claims. Methods of preparation are claimed and >250 example prepns. of I are included. For example, II was prepared by condensing 4-(6,7-dichloro-1H-imidazo[4,5-b]pyridin-2-yl)aniline with 4-methoxybenzenesulfonyl chloride in pyridine. In another example, 5-bromo-2,3-diaminopyridine was cyclized with 4-hydroxybenzaldehyde in DMF in the presence of iron(III) chloride hexahydrate to give 65% 4-(6-bromo-3H-imidazo[4,5-b]pyridin-2-yl)phenol. In another example, N-benzyl-5-(6-bromo-3H-imidazo[4,5-b]pyridin-2-yl)pyridin-2-amine bis(trifluoroacetate) was prepared in 3 steps starting with cyclization of 2,3-diamino-5-bromopyridine with 6-chloronicotinic acid in the presence of polyphosphoric acid (53%) followed by chlorination using POCl3 to give 44% 6-bromo-2-(6-chloropyridin-3-yl)-3H-imidazo[4,5-b]pyridine followed by condensation with benzylamine (51%). Compds. of Examples 1 to 278 gave IC50 values for inhibition of Itk activity of <25 μM, e.g. 0.26 μM for II.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of imidazopyridines as Itk kinase inhibitors for use against asthma and allergic rhinitis)

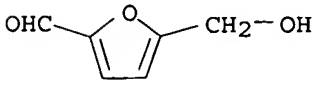
RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 57 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:91375 CAPLUS
DOCUMENT NUMBER: 140:259211
TITLE: Identification and determination of the major constituents in traditional Chinese medicine Si-Wu-Tang by HPLC coupled with DAD and ESI-MS
AUTHOR(S): Zhang, Haijiang; Shen, Peng; Cheng, Yiyu
CORPORATE SOURCE: Pharmaceutical Informatics Institute, College of Pharmaceutical Sciences, Zhejiang University, Hangzhou, 310027, Peop. Rep. China
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (2004), 34(3), 705-713
CODEN: JPBADA; ISSN: 0731-7085
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB An HPLC/DAD/ESI/MS method was established for the qual. and quant. anal. of the major constituents in Si-Wu-Tang, a traditional Chinese medicine formula. Based on the baseline chromatog. separation of most constituents in Si-Wu-Tang on hypersil C18 column with water-acetonitrile-acetic acid as mobile phase, 12 compds. including phenolic acids, phthalides, and terpene glycoside were identified by online ESI-MS and the comparison with literature data and standard samples. Most of these compds. derive from Paeonia lactiflora and Ligusticum chuanxiong. Seven of them were quantitated by HPLC coupled with DAD. The validation of the method, including sensitivity, linearity, repeatability, recovery, were examined The linear calibration curve were acquired with R2>0.99 and LOD (S/N = 3) were between 0.75 and 5 ng. The repeatability was evaluated by intra- and inter-day assays and R.S.D. value were within ±2.38%. The recovery rates of selected compds. were in the range of 96.64-105.21% with R.S.D. less than 3.22%.
IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: ANT (Analyte); ANST (Analytical study)
(determination of major constituents in Chinese medicine Si-Wu-Tang by HPLC coupled with DAD and ESI-MS)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 58 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:80693 CAPLUS
DOCUMENT NUMBER: 140:128434
TITLE: Preparation of pyrazolopyrimidines as kinase inhibitors for the treatment of type 2 diabetes
INVENTOR(S): Brown, Matthew Lee; Cheung, Mui; Dickerson, Scott Howard; Drewry, David Harold; Lackey, Karen Elizabeth;

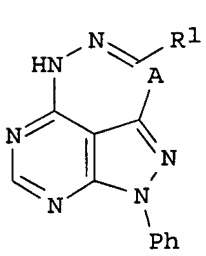
Peat, Andrew James; Thomson, Stephen Andrew; Veal, James Marvin; Wilson, Jayme Lyn Roark

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009596	A2	20040129	WO 2003-US22717	20030721
WO 2004009596	A3	20040318		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003254051	A1	20040209	AU 2003-254051	20030721
EP 1534389	A2	20050601	EP 2003-765826	20030721
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006514918	T	20060518	JP 2004-523201	20030721
US 2005267133	A1	20051201	US 2005-521910	20050120
PRIORITY APPLN. INFO.:			US 2002-397898P	P 20020723
			WO 2003-US22717	W 20030721

OTHER SOURCE(S): MARPAT 140:128434

GI



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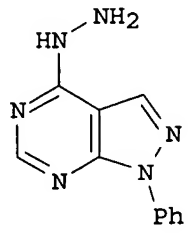
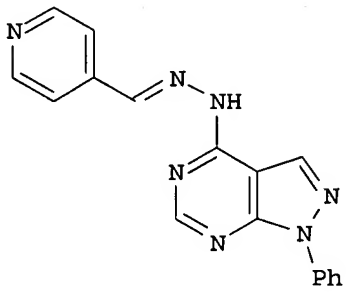


II



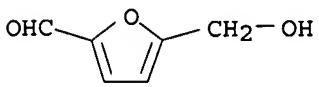
III

AB Title compds. I [A = H, alkyl, aryl; R1 = substituted Ph, e.g., NR3R4, SO2R8, COR17, etc.; R3, R4 = H, alkyl, alkylsulfonyl, etc.; R8 = alkyl, NR9R10; R9, R10 = H, alkyl, (CH2)xNR6R7; R6, R7 = H, alkyl or combined to form 5-6 membered ring; x = 0-3; R17 = OH, alkoxy, NR18R19; R18, R19 = H, alkyl, (CH2)xR20; R20 = (un)substituted alkyl sulfonyl, OH] and their pharmaceutically acceptable salts were prepared For example, condensation of hydrazone II and isonicotinaldehyde afforded pyrazolopyrimidine III in 63% yield. In GSK-3 kinase inhibition assays, 61-examples of compds. I exhibited pIC50 values ranging from 5.0- >7.0, e.g., the pIC50 value of pyrazolopyrimidine III was 6.0-7.0. Compds. I are claimed useful for the treatment of type 2 diabetes, hyperlipidemia, obesity, etc.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrazolopyrimidines as kinase inhibitors for the treatment of type 2 diabetes)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 59 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2688 CAPLUS

DOCUMENT NUMBER: 140:65204

TITLE: Composition for the treatment of skin diseases and for improving hair growth

INVENTOR(S): Gardovic, Milenka

PATENT ASSIGNEE(S): Swed.

SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000305	A1	20031231	WO 2003-SE1029	20030618
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003237742	A1	20040106	AU 2003-237742	20030618
PRIORITY APPLN. INFO.:			SE 2002-1880 A	20020619
			WO 2003-SE1029 W	20030618

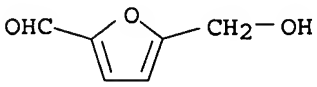
AB The present invention is related to a composition comprising at least one of furfural, furfuryl alc. and, 5-hydroxymethylfurfural and also at least one of 2-methoxy-p-cresol, 4-hydroxy-3-methoxybenzaldehyde and isoeugenol, and especially a composition comprising all of these compds. Composition according to the above may be used as a pharmaceutical, for example for the

treatment of skin diseases and for the improvement of hair growth. The invention relates also to a process for the treatment of the conditions mentioned above and the use of a composition mentioned above for the production of
a pharmaceutical composition for the treatment of skin diseases and for the improvement of hair growth. A hair preparation contained furfural 8.0, furfuryl alc. 16.0, 5-hydroxymethylfurfural 21.7, 2-methoxy-p-cresol 217, 4-hydroxy-3-methoxybenzaldehyde 10.9, and isoeugenol 21.7%. The front part of the crown of a 67-yr-old man, who had suffered from substantial loss of hair was greased once per day during three weeks. The result was that brown hair grew out on 60 % of the bald area.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(composition for treatment of skin diseases and for improving hair growth)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 60 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:502250 CAPLUS

DOCUMENT NUMBER: 140:270725

TITLE: A method of synthesis of 5-hydroxymethylfurfurol ethers, useful in the pharmaceutical and perfume industries, by dehydration of sugars and alcohols

INVENTOR(S): Taraban'ko, V. E.; Chernyak, M. Yu.; Kuznetsov, B. N.

PATENT ASSIGNEE(S): Institut Khimii i Khimicheskoi Tekhnologii SO RAN, Russia

SOURCE: Russ., No pp. given
CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2203279	C1	20030427	RU 2001-128587	20011022

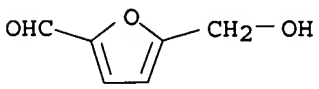
PRIORITY APPLN. INFO.: RU 2001-128587 20011022

OTHER SOURCE(S): CASREACT 140:270725

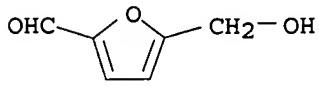
AB The invention relates to technol. of synthesis of 5-hydroxymethylfurfurol ethers [i.e., 5-(hydroxymethyl)furan-2-carboxaldehyde ethers] from sucrose. The end product is synthesized by acid-catalyzed dehydration of sucrose or fructose in a biphase system, in the presence of sodium bisulfate or a mixture of sodium bisulfate and sulfuric acid as a catalyst, and aliphatic alcs. as an alkylating agent. Advantages of the proposed method include (1) use of low-priced and easily available parent substances (sucrose or fructose) and (2) use of sodium bisulfate instead of expensive BaCO3. For instance, 5-butoxymethylfurfurol was prepared from sucrose, sodium bisulfate, and butanol, with a yield of 9-10%. The synthesized ethers can be used in the pharmaceutical and perfume industries as raw materials for many syntheses.

IT 67-47-0P, 5-Hydroxymethylfurfurol
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of hydroxymethylfurfurol ethers via sodium bisulfate-catalyzed dehydration of sucrose or fructose and subsequent etherification of hydroxymethylfurfurol)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

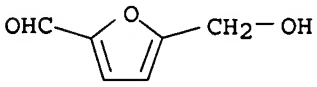


IT 67-47-0DP, 5-Hydroxymethylfurfurol, ether derivs.
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of hydroxymethylfurfurol ethers via sodium bisulfate-catalyzed dehydration of sucrose or fructose and subsequent etherification of hydroxymethylfurfurol)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 61 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:462307 CAPLUS
DOCUMENT NUMBER: 140:47243
TITLE: Studies on the stability of cardioplegic solutions and on their shelf life
AUTHOR(S): Takekuma, Yoh; Yamashita, Yasunori; Iwai, Miwako; Shiga, Hiroyasu; Suda, Noriyuki; Kishino, Satoshi; Miyazaki, Katsumi
CORPORATE SOURCE: Department of Pharmacy, Hokkaido University Hospital, Hokkaido, 060-8648, Japan
SOURCE: Iryo Yakugaku (2003), 29(2), 225-229
CODEN: IYRAA3
PUBLISHER: Nippon Iryo Yakugakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Cardioplegic solution (CPS), a pharmaceutical product manufactured at our hospital, is used for operative myocardial protection. Glucose, one of the elements of CPS, is known to disintegrate into formic acid, levulinic acid and 5-Hydroxymethylfurfural (5-HMF). Accordingly, the stability and their shelf life of CPS were evaluated by pH variation, visual inspection and the amount of 5-HMF. CPS was preserved for 12 mo at room temperature (25°) and at 4°(under room light or in darkness) after autoclaving at 115° and 0.7 kg/cm2 for 30 min. The pH of the sample was observed along with a periodical visual inspection. The amount of 5-HMF in the CPS was determined by high-performance liquid chromatog. (HPLC) with an UV detector at 284 nm. It was found that light had no effect on the production of 5-HMF. The amts. of 5-HMF in the samples preserved at 25°C tended to be greater than those in samples preserved at 4°C. However, it seems that the CPS was relatively stable since the amount of 5-HMF in the CPS was less than 1/40 of the limit noted in the fourteenth revised edition of the Japanese Pharmacopoeia (JPXIV). These findings suggest that a temperature of 4°C is preferable to 25°C for the preservation of CPS and that the CPS remains relatively stable for more than 12 mo.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(studies on the stability of cardioplegic solns. and on their shelf life)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



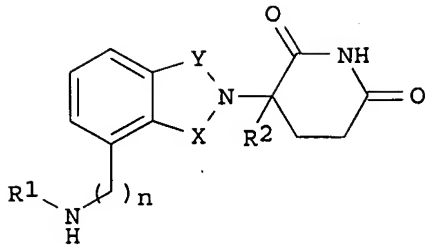
L3 ANSWER 62 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:396458 CAPLUS
DOCUMENT NUMBER: 138:385311
TITLE: Preparation of 2-(2,6-dioxo-3-piperidyl)isoindoline-1,3-diones, related compounds, and compositions thereof as TNF-α inhibitors for treatment of cancer, inflammatory disorders, heart disease, and related disorders
INVENTOR(S): Robarge, Michael J.; Chen, Roger Shen-Chu; Muller, George W.; Man, Hon-Wah
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 100 pp., CCont.-in-part of U.S. Ser. No. 972,487.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003096841	A1	20030522	US 2001-32286	20011221
US 7091353	B2	20060815		
US 2003045552	A1	20030306	US 2001-972487	20011005
AT 352548	T	20070215	AT 2001-997133	20011221
EP 1767533	A1	20070328	EP 2006-17608	20011221
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, LT, LV, MK, RO, SI				
ES 2275758	T3	20070616	ES 2001-1997133	20011221
ZA 2003005759	A	20050117	ZA 2003-5759	20030101
US 2006025597	A1	20060202	US 2005-230448	20050921
JP 2006089495	A	20060406	JP 2005-321049	20051104
AU 2006200717	A1	20060316	AU 2006-200717	20060221

PRIORITY APPLN. INFO.:

US 2000-258372P	P	20001227
US 2001-972487	A2	20011005
AU 2002-248252	A3	20011221
EP 2001-997133	A3	20011221
JP 2002-559408	A3	20011221
US 2001-32286	A3	20011221

OTHER SOURCE(S): MARPAT 138:385311
GI



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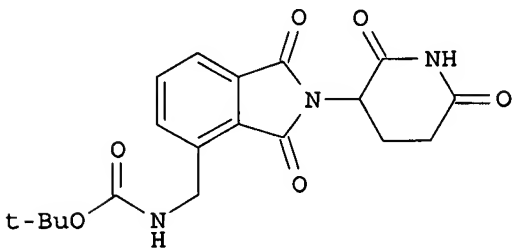


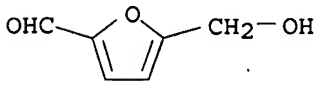
II

AB The invention relates to isoindole-imide compds. and pharmaceutically acceptable salts, hydrates, solvates, clathrates, enantiomers, diastereomers, racemates, or mixts. of stereoisomers thereof, pharmaceutical compns. comprising these isoindole-imide compds., and methods for reducing the level of cytokines and their precursors in mammals. In particular, the invention pertains to isoindole-imide compds. that are potent inhibitors of the production of TNF-α in mammals. The isoindole-imides described herein are useful for treating or preventing diseases or disorders in mammals, for example, cancers, such as solid tumors and blood-born tumors; heart disease, such as congestive heart failure; osteoporosis; and genetic, inflammatory; allergic; and autoimmune diseases. Title isoindole-imides I [wherein one of X and Y is CO and the other is CH2 or CO; R1 = H, (cyclo)alkyl, alkenyl, alkynyl, benzyl, aryl, alkylheterocycloalkyl, alkylheteroaryl, COR3, CSR3, CO2R4, alkyl-(NR6)2, alkyl-OR5, alkyl-CO2R5, CONHR3, CSNHR3, CON(R3)2, CSN(R3)2, or alkyl-OCOR5; R2 = H, benzyl, alkyl, alkenyl, or alkynyl; R3 = independently (cyclo)alkyl, alkenyl, alkynyl, benzyl, aryl, alkylheterocycloalkyl, alkylheteroaryl, alkyl-N(R6)2, alkyl-OR5, alkyl-CO2R5, alkyl-OCOR5, or CO2R5; R4 = alkyl, alkenyl, alkynyl, alkyl-OR5, benzyl, aryl, alkylheterocycloalkyl, or alkylheteroaryl; R5 = alkyl, alkenyl, alkynyl, benzyl, aryl, or heteroaryl; R6 = independently H, alkyl, alkenyl, alkynyl, benzyl, (hetero)aryl, or alkyl-CO2R5; or R6 groups may join to form a heterocycloalkyl group; n = 0-1; with the proviso that when n = 0, R1 ≠ H; or pharmaceutically acceptable salts, hydrates, solvates, clathrates, enantiomers, diastereomers, racemates, or mixts. of stereoisomers thereof] were prepared for reducing the level of cytokines and their precursors in mammals. In particular, the invention pertains to isoindole-imide compds. that are potent inhibitors of the production of TNF-α (no data). For example, Me 2-(methoxycarbonyl)-3-nitrobenzoate was hydrogenated with 10% Pd/C (87%). The amine was converted to the nitrile by diazonium salt formation effected by treatment with NaNO3 followed by cyanide formation using classic Sandmeyer procedure (65%). The nitrile was reduced with 10% Pd/C in MeOH and aqueous HCl under hydrogen to afford Me 3-aminomethyl-2-(methoxycarbonyl)benzoate•HCl (90%), which was treated with TEA and then reacted with di-t-Bu dicarbonate to give the carbamate (93%). Cyclization with 3-aminoglutarimide•HCl using diisopropylethylamine in DMF produced II (82%). The 2-(2,6-dioxo-3-piperidyl)isoindoline-1,3-diones and pharmaceutical compns. comprising them are useful for treating or preventing diseases or disorders in mammals, e.g. cancers,

such as solid tumors and blood-born tumors; heart disease, such as congestive heart failure; osteoporosis; and genetic, inflammatory, allergic, and autoimmune diseases (no data).

IT 67-47-0, 5-Hydroxymethylfuran-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of (oxopiperidyl)isoindolinone TNF-α inhibitors by cycloaddn. of aminoglutarimides to carboxybenzoates)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



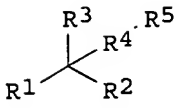
REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 63 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:319708 CAPLUS
DOCUMENT NUMBER: 138:337984
TITLE: Preparation of bis-heteroaryl alkanes as protein tyrosine phosphatase 1B inhibitors
INVENTOR(S): Mjalli, Adnan M. M.; Shahbaz, Kathy G. J.
PATENT ASSIGNEE(S): Transtech Pharma, Inc., USA
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003032982	A1	20030424	WO 2002-US33517	20021018
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002337912	A1	20030428	AU 2002-337912	20021018
US 2003130335	A1	20030710	US 2002-273795	20021018
US 7022730	B2	20060404		
EP 1438044	A1	20040721	EP 2002-773816	20021018
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005508355	T	20050331	JP 2003-535785	20021018
US 2006128784	A1	20060615	US 2006-345065	20060201

PRIORITY APPLN. INFO.:		
US 2001-348187P	P	20011019
US 2002-273795	A1	20021018
WO 2002-US33517	W	20021018

OTHER SOURCE(S): MARPAT 138:337984
GI



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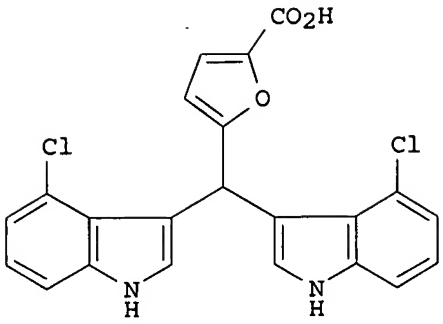


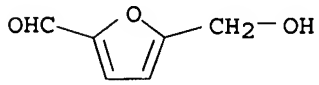
II

AB Title compds. I [R1-2 = indolyl, etc.; R3 = H, alk(en/yn)yl; R4 = (hetero)arylene; R5 = H, alk(en/yn)yl, (hetero)aryl, etc.] are prepared For instance, bis(4-chloroindol-3-yl)(5-carboxy-2-furyl)methane was prepared in several steps from 4-chloroindole and 5-formylfuran-2-carboxylic acid. Eighteen examples are provided. Compds. of the invention are found to inhibit protein tyrosine phosphatase in the range of 0.01 to 30 μM. I are useful for the management, treatment, control and adjunct treatment of diseases in mammals mediated by PTPase activity. Such diseases include type I diabetes, type II diabetes, immune dysfunction, AIDS, autoimmunity, glucose intolerance, obesity, cancer, psoriasis, allergic diseases, etc.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of bis-indolyl alkanes as protein tyrosine phosphatase 1B inhibitors)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 64 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:52705 CAPLUS

DOCUMENT NUMBER: 139:173305

TITLE: Cytotoxicities of metabolites from a Monocillium species

AUTHOR(S): Khondkar, Proma; Rahman, Mohammad Mukhlesur; Islam, Mohammad Anwarul

CORPORATE SOURCE: Department of Pharmacy, University of Rajshahi, Rajshahi, 6205, Bangladesh

SOURCE: Pakistan Journal of Pharmacology (2002), 19(1), 9-12
CODEN: PJPHEO; ISSN: 0255-7088

PUBLISHER: Pakistan Journal of Pharmacology

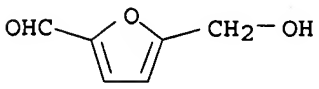
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The cultural broth of a Monocillium species upon extraction with Et acetate afforded an antimicrobial compound, 5-hydroxymethylfurfural (1). Both the Et acetate extract and isolated compound (1) showed strong cytotoxicities in brine shrimp lethality' bioassay. The LC50 values of Et acetate extract and compound 1 were determined graphically and found to be 14.16 μg/mL and 27.99 μg/mL, resp.

IT 67-47-0P, 5-Hydroxymethyl furfural
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(cytotoxicities of antimicrobial metabolites from a Monocillium species)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 65 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:814089 CAPLUS
DOCUMENT NUMBER: 137:325178
TITLE: Preparation of 3,4-di-substituted cyclobutene-1,2-diones as cxc-chemokine receptor ligands
INVENTOR(S): Taveras, Arthur G.; Aki, Cynthia J.; Bond, Richard W.; Chao, Jianping; Dwyer, Michael; Ferreira, Johan A.; Chao, Jianhua; Yu, Younong; Baldwin, John J.; Kaiser, Bernd; Li, Ge; Merritt, J. Robert; Nelson, Kingsley H.; Rokosz, Laura L.
PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia, Inc.
SOURCE: PCT Int. Appl., 394 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083624	A1	20021024	WO 2002-US12681	20020415
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VN, YU, ZA, ZM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2444031	A1	20021024	CA 2002-2444031	20020415
AU 2002311841	A1	20021028	AU 2002-311841	20020415
NZ 529551	A	20031219	NZ 2002-529551	20020415
EP 1381590	A1	20040121	EP 2002-739172	20020415
EP 1381590	B1	20070620		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002008957	A	20040622	BR 2002-8957	20020415
CN 1516687	A	20040728	CN 2002-811979	20020415
JP 2004532846	T	20041028	JP 2002-581381	20020415
HU 2004001783	A2	20050128	HU 2004-1783	20020415
CN 1990457	A	20070704	CN 2006-10137409	20020415
AT 365154	T	20070715	AT 2002-739172	20020415
EP 1818325	A2	20070815	EP 2007-10711	20020415
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, LT, LV, MK, RO, SI				
NZ 543869	A	20070928	NZ 2002-543869	20020415
ES 2287284	T3	20071216	ES 2002-2739172	20020415
ZA 2003007905	A	20050110	ZA 2003-7905	20031009

NO 2003004612	A	20031208	NO 2003-4612		20031015
MX 2003PA09441	A	20040212	MX 2003-PA9441		20031015
IN 2003CN01631	A	20051125	IN 2003-CN1631		20031015
HK 1057538	A1	20070810	HK 2004-100477		20040121
AU 2006203679	A1	20060914	AU 2006-203679		20060824
IN 2007CN02574	A	20071116	IN 2007-CN2574		20070614
PRIORITY APPLN. INFO.:			US 2001-284026P	P	20010416
			CN 2002-811979	A3	20020415
			EP 2002-739172	A3	20020415
			WO 2002-US12681	W	20020415
			IN 2003-CN1631	A3	20031015

OTHER SOURCE(S): MARPAT 137:325178

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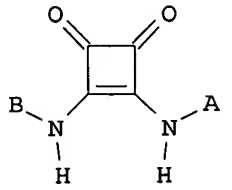

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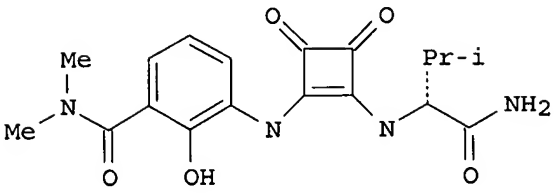


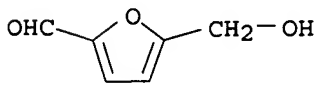
II

AB Title compds. I [A = (un)substituted heterocycle, heterocyclealkyl, heteroaryl, heteroarylalkyl, cycloalkyl, etc.; B = (un)substituted aryl, heteroaryl, heterocycle, heteroarylarene, etc.], or a pharmaceutically acceptable salt or solvate thereof, are prepared and disclosed as cxc-chemokine receptor ligands. Thus, II was prepared by substitution of (dimethylaminocarbonylhydroxyphenylamino)(ethoxy)cyclobute nedione [preparation given] with (R)-2-amino-N,3-dimethylbutanamide monohydrochloride [preparation given]. Compds. of the invention demonstrated an IC50 value of < 20 μM in CXCR1 SPA assay and < 5 μM in CXCR2 SPA assay. I are useful for the treatment of chemokine-mediated diseases such as acute and chronic inflammatory disorders and cancer.

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective preparation of disubstituted cyclobutenediones as cxc-chemokine receptor ligands)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

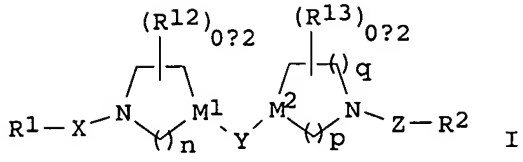
L3 ANSWER 66 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:716267 CAPLUS

DOCUMENT NUMBER: 137:247716
TITLE: Preparation and use of substituted piperazine/piperidine derivatives as H receptor antagonists
INVENTOR(S): Rosenblum, Stuart B.; Zeng, Qingbei; Mutahi, Mwangi Wa; Aslanian, Robert G.; Ting, Pauline C.; Shih, Neng-Yang; Solomon, Daniel M.; Cao, Jianhua; Vaccaro, Henry A.; McCormick, Kevin D.; Baldwin, John J.; Li, Ge
PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia, Inc.
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072570	A2	20020919	WO 2002-US7106	20020311
WO 2002072570	A3	20030306		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VN, YU, ZA, ZM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2440559	A1	20020919	CA 2002-2440559	20020311
AU 2002244271	A1	20020924	AU 2002-244271	20020311
US 2003109564	A1	20030612	US 2002-95134	20020311
US 6849621	B2	20050201		
EP 1373251	A2	20040102	EP 2002-709808	20020311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN 1496362	A	20040512	CN 2002-806561	20020311
JP 2004520435	T	20040708	JP 2002-571486	20020311
MX 2003PA08356	A	20031211	MX 2003-PA8356	20030912
US 2005113383	A1	20050526	US 2004-974329	20041027
US 7238688	B2	20070703		
PRIORITY APPLN. INFO.:			US 2001-275417P	P 20010313
			US 2002-95134	A3 20020311
			WO 2002-US7106	W 20020311

OTHER SOURCE(S): MARPAT 137:247716
GI



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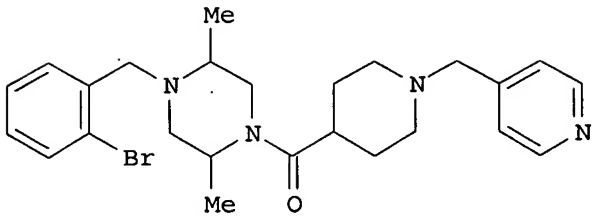


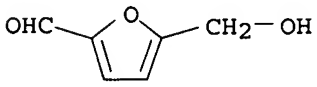
II

AB Title compds. I [R = (hetero)aryl, heterocycloalkyl, alkyl, carboxamido, etc.; X = alkyl, S(O)2; Y = bond, CO, CS, alkyl, amido, etc.; M = C, N; Z = alkyl, SO2, CO, carboxamido; R = 5-6 membered heteroaryl, alkyl, aryl, etc.; R = alkyl, OH, alkoxy, F, etc.; n, p, q = 1-3; with some provisions] were prepared For instance, 2,5-dimethylpiperazine was alkylated with 2-bromobenzaldehyde (CH2Cl2, NaHB(OAc)3) and subsequently acylated with N-Boc-isonipecotic acid (CH2Cl2, PyBOP, i-Pr2NEt). The resulting intermediate was deprotected and reductively alkylated with pyridine-4-carboxaldehyde to afford. Selected example compds. had Ki within 0.2 and 600 nM for the H3 receptor. : I, alone and in combination with a H1 receptor antagonist, are used for the treatment of various diseases or conditions, such as, allergy, allergy-induced airway responses and congestion (e.g., nasal congestion).

IT 67-47-0, 5-Hydroxymethyl-2-furancarboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation and use of substituted piperazine/piperidine derivs. as H receptor antagonists)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- . (CA INDEX NAME)



L3 ANSWER 67 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:696666 CAPLUS

DOCUMENT NUMBER: 137:217244

TITLE: Preparation of amino acid-containing non-nucleoside reverse transcriptase inhibitors

INVENTOR(S): Zhou, Xiao-xiong; Johansson, Nils-Gunnar; Wahling, Horst; Sund, Christian; Salvador, Lourdes; Lindstrom, Stefan; Wallberg, Hans; Sahlberg, Christer

PATENT ASSIGNEE(S): Medivir AB, Swed.

SOURCE: U.S. Pat. Appl. Publ., 40 pp., Cont.-in-part of Appl. No. PCT/SE99/01403.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002128301	A1	20020912	US 2001-927254	20010810
ZA 9807267	A	19990215	ZA 1998-7267	19980813
WO 9909031	A1	19990225	WO 1998-SE1467	19980814
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1123935	A2	20010816	EP 2001-103370	19980814
EP 1123935	A3	20010905		
EP 1123935	B1	20050413		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
NZ 508502	A	20020426	NZ 1998-508502	19980814
CN 1872869	A	20061206	CN 2006-10099722	19980814
ZA 9901148	A	19990812	ZA 1999-1148	19990212
US 6458772	B1	20021001	US 1999-249317	19990212
WO 9941275	A1	19990819	WO 1999-SE194	19990215
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
WO 2000047561	A1	20000817	WO 1999-SE1403	19990818
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 775578	B2	20040805	AU 2001-35224	20010417
AU 2003200551	A1	20030501	AU 2003-200551	20030218

PRIORITY APPLN. INFO.:		
SE 1998-452	A	19980213
SE 1998-469	A	19980216
SE 1998-1216	A	19980403
WO 1998-SE1467	W	19980414
ZA 1998-7267	A	19980813
SE 1998-3438	A	19981007
US 1999-249317	A2	19990212
WO 1999-SE194	W	19990215
WO 1999-SE1403	A2	19990818
SE 1997-2957	A	19970815
SE 1997-4147	A	19971112
AU 1998-87548	A3	19980814
CN 2003-2003157988	A3	19980814
EP 1998-939041	A3	19980814
NZ 1998-502837	A1	19980814
AU 1999-32820	A3	19990215

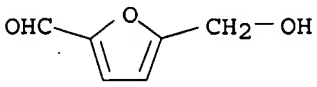
OTHER SOURCE(S): MARPAT 137:217244

AB Non-nucleoside reverse transcriptase inhibitors Rx-L*-O-Ar1-CHR4CHR5NHC(:Z)NH-Ar2 [Ar1 is an unsatd., optionally substituted, mono- or

bicyclic ring structure comprising 0-3 hetero atoms selected from S, O and N; Ar2 is an aromatic, optionally substituted, monocyclic ring structure comprising at least one nitrogen hetero atom and 0-2 further hetero atoms selected from S, O and N; R4, R5 = H, (cyclo)alkyl, alkenyl, alkynyl, alkoxy, alkanoyloxy, alkylthio, amino, carboxy, carbamoyl, cyano, halo, hydroxy, aminomethyl, hydroxymethyl, carboxymethyl, haloalkylthio, nitro; or R4 and R5 join to form a 3-6 membered, optionally substituted ring structure; Z = O or S; Rx is the residue of a natural or unnatural amino acid; L* is a linker moiety which is ether, carbonate or ester] or their pharmaceutically-acceptable salts were prepared as anti-HIV agents with favorable pharmacokinetic properties. Thus, (1S,2S)-N-[cis-2-(6-fluoro-2-(L-valyloxy)methoxycarbonyloxy-3-propionylphenyl)cyclopropyl]-N'-[2-(5-cyanopyridyl)]urea was prepared and showed 70% bioavailability of released drug at a dose of 0.027 mmol/kg after 6 h in a rat bioavailability assay model.

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of amino acid-containing non-nucleoside reverse transcriptase inhibitors)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



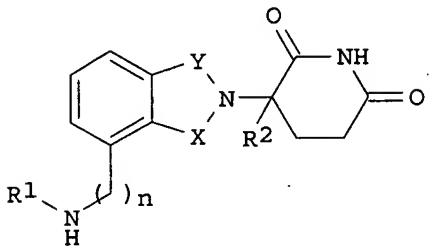
L3 ANSWER 68 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:575064 CAPLUS
DOCUMENT NUMBER: 137:125091
TITLE: Preparation of 2-(2,6-dioxo-3-piperidyl)isoindoline-1,3-diones, related compounds, and compositions thereof as TNF-α inhibitors for treatment of cancer, inflammatory disorders, heart disease, and related disorders
INVENTOR(S): Robarge, Michael J.; Chen, Roger Shen-Chu; Muller, George W.; Man, Hon-Wah
PATENT ASSIGNEE(S): Celgene Corporation, USA
SOURCE: PCT Int. Appl., 224 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002059106	A1	20020801	WO 2001-US50401	20011221
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003045552	A1	20030306	US 2001-972487	20011005
CA 2433021	A1	20020801	CA 2001-2433021	20011221
AU 2002248252	A1	20020806	AU 2002-248252	20011221
EP 1363900	A1	20031126	EP 2001-997133	20011221

EP 1363900		B1	20070124			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR						
HU 2003002578		A2	20031128	HU 2003-2578		20011221
HU 2003002578		A3	20070828			
JP 2004525889		T	20040826	JP 2002-559408		20011221
NZ 526893		A	20051028	NZ 2001-526893		20011221
AT 352548		T	20070215	AT 2001-997133		20011221
EP 1767533		A1	20070328	EP 2006-17608		20011221
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, LT, LV, MK, RO, SI						
ES 2275758		T3	20070616	ES 2001-1997133		20011221
ZA 2003005759		A	20050117	ZA 2003-5759		20030101
MX 2003PA05786		A	20040126	MX 2003-PA5786		20030625
KR 747436		B1	20070809	KR 2003-708812		20030627
HK 1061396		A1	20070824	HK 2004-102764		20040420
JP 2006089495		A	20060406	JP 2005-321049		20051104
AU 2006200717		A1	20060316	AU 2006-200717		20060221
KR 2007091235		A	20070907	KR 2007-718941		20070817
PRIORITY APPLN. INFO.:				US 2000-258372P	P	20001227
				US 2001-972487	A	20011005
				AU 2002-248252	A3	20011221
				EP 2001-997133	A3	20011221
				JP 2002-559408	A3	20011221
				WO 2001-US50401	W	20011221
				KR 2007-703140	A3	20070208

OTHER SOURCE(S): MARPAT 137:125091

GI



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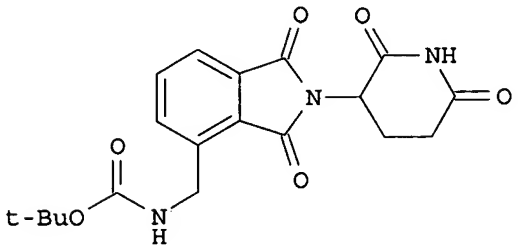


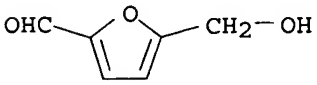
II

AB Title isoindole-imides I [wherein one of X and Y is CO and the other is CH2 or CO; R1 = H, (cyclo)alkyl, alkenyl, alkynyl, benzyl, aryl, alkylheterocycloalkyl, alkylheteroaryl, COR3, CSR3, CO2R4, alkyl-(NR6)2, alkyl-OR5, alkyl-CO2R5, CONHR3, CSNHR3, CON(R3)2, CSN(R3)2, or alkyl-OCOR5; R2 = H, benzyl, alkyl, alkenyl, or alkynyl; R3 = independently (cyclo)alkyl, alkenyl, alkynyl, benzyl, aryl, alkylheterocycloalkyl, alkylheteroaryl, alkyl-N(R6)2, alkyl-OR5, alkyl-CO2R5, alkyl-OCOR5, or CO2R5; R4 = alkyl, alkenyl, alkynyl, alkyl-OR5, benzyl, aryl, alkylheterocycloalkyl, or alkylheteroaryl; R5 =

alkyl, alkenyl, alkynyl, benzyl, aryl, or heteroaryl; R6 = independently H, alkyl, alkenyl, alkynyl, benzyl, (hetero)aryl, or alkyl-CO2R5; or R6 groups may join to form a heterocycloalkyl group; n = 0-1; with the proviso that when n = 0, R1 ≠ H; or pharmaceutically acceptable salts, hydrates, solvates, clathrates, enantiomers, diastereomers, racemates, or mixts. of stereoisomers thereof] were prepared for reducing the level of cytokines and their precursors in mammals. In particular, the invention pertains to isoindole-imide compds. that are potent inhibitors of the production of TNF-α (no data). For example, Me 2-(methoxycarbonyl)-3-nitrobenzoate was hydrogenated with 10% Pd/C (87%). The amine was converted to the nitrile by diazonium salt formation effected by treatment with NaNO3 followed by cyanide formation using classic Sandmeyer procedure (65%). The nitrile was reduced with 10% Pd/C in MeOH and aqueous HCl under hydrogen to afford Me 3-aminomethyl-2-(methoxycarbonyl)benzoate•HCl (90%), which was treated with TEA and then reacted with di-t-Bu dicarbonate to give the carbamate (93%). Cyclization with 3-aminoglutarimide•HCl using diisopropylethylamine in DMF produced II (82%). The 2-(2,6-dioxo-3-piperidyl)isoindoline-1,3-diones and pharmaceutical compns. comprising them are useful for treating or preventing diseases or disorders in mammals, e.g. cancers, such as solid tumors and blood-born tumors; heart disease, such as congestive heart failure; osteoporosis; and genetic, inflammatory, allergic, and autoimmune diseases (no data).

IT 67-47-0, 5-Hydroxymethylfuran-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of (oxopiperidyl)isoindolinone TNF-α inhibitors by cycloaddn. of aminoglutarimides to carboxybenzoates)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 69 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:39485 CAPLUS
DOCUMENT NUMBER: 137:310758
TITLE: Synthesis, chemistry and applications of 5-hydroxymethyl-furfural and its derivatives
AUTHOR(S): Lewkowski, Jaroslaw
CORPORATE SOURCE: Dep. Organic Chem., University of Lodz, Lodz, 90-136, Pol.
SOURCE: ARKIVOC [online computer file] (2001), 2(1), No pp. given
CODEN: AKVCFI
URL: http://www.arkat-usa.org/ARKIVOC/JOURNAL_CONTENT/manuscripts/2001/01-403CR%20as%20published%20mainmanuscript.pdf
PUBLISHER: ARKAT Foundation
DOCUMENT TYPE: Journal; General Review; (online computer file)
LANGUAGE: English

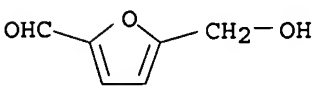
AB A review on the recent developments in the synthesis, chemical and applications of 5-hydroxymethylfurfural (HMF) and its derivs. Due to its high reactivity and the polyfunctionality, HMF is a good raw material for the synthesis of precursors of various pharmaceuticals, thermo-resistant polymers and complex macrocycles. Dialdehydes are precursors for the synthesis of complexing macrocycles, oxo-porphyrins, oxo-annulenes as well as mono- and bis-alkenyl and alkynyl furans. The

diacid is a building block for numerous polyesters and polyamides and its derivs. are useful in pharmacol. HMF shows a weak cytotoxicity and mutagenicity in human. Derivs. of HMF are applied in agrochem. as fungicides, in galvanochem. as corrosion inhibitors, in cosmetic industry and as flavor agents. The synthesis of HMF is based on the triple dehydration of hexoses using various substrates such as oligo- and polysaccharides.

IT 67-47-0P, 5-Hydroxymethylfurfural
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis, chemical and applications of hydroxymethylfurfural, furandicarboxaldehyde, and furandicarboxyic acid)

RN 67-47-0 CAPLUS

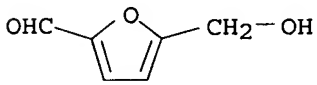
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



IT 67-47-0DP, 5-Hydroxymethylfurfural, derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis, chemical and applications of hydroxymethylfurfural, furandicarboxaldehyde, and furandicarboxyic acid)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 312 THERE ARE 312 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 70 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:34845 CAPLUS

DOCUMENT NUMBER: 136:241062

TITLE: Structural analysis on the constituents of Lonicera species. XVI. On the chemical constituents of the flower buds of Lonicera japonica thumb. (3)

AUTHOR(S): Kakuda, Rie; Yaoita, Yasunori; Machida, Koichi; Kikuchi, Masao

CORPORATE SOURCE: Tohoku Pharm. Univ., Japan

SOURCE: Journal of Tohoku Pharmaceutical University (2000), 47, 55-60
CODEN: JTPUFY; ISSN: 1345-157X

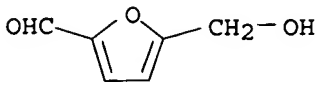
PUBLISHER: Tohoku Yakka Daigaku

DOCUMENT TYPE: Journal

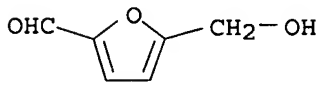
LANGUAGE: Japanese

AB Ergosta-5,24(28)-dien-3β-ol, β-sitosterol, campesterol, stigmasterol, β-sitosterol β-D-glucopyranoside, 5-(hydroxymethyl)-2-furaldehyde, p-hydroxybenzaldehyde, protochatechualdehyde, p-hydroxybenzoic acid, vanillic acid, Me quinate, luteolin 7-O-β-D-glucopyranoside, kaempferol 3-O-β-D-glucopyranoside, quercetin 3-O-β-D-glucopyranoside, isorhamnetin 3-O-β-D-glucopyranoside, kaempferol 3-O-rutinoside, isorhamnetin 3-O-rutinoside, uridine, adenine, loganic acid, secologanoside, and other components were isolated from the flower buds of Lonicera japonica Thumb. (Loniceraceae). The structures of main compds. were elucidated on the

basis of NMR and other physicochem. evidences.
IT 67-47-0P, 5-(Hydroxymethyl)-2-furaldehyde
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(structural anal. on the constituents of Lonicera species. XVI. on the chemical constituents of the flower buds of Lonicera japonica thumb. (3))
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 71 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:173328 CAPLUS
DOCUMENT NUMBER: 135:192824
TITLE: Study on chemical constituents of Gymnadenia conopsea
AUTHOR(S): Li, Shuai; Wang, Dong; Kuang, Haixue
CORPORATE SOURCE: College of Pharmacy, Helongjiang University of Traditional Chinese Medicines, Harbin, 150040, Peop. Rep. China
SOURCE: Zhongcaoyao (2001), 32(1), 18, 38
CODEN: CTYAD8; ISSN: 0253-2670
PUBLISHER: Zhongcaoyao Zazhi Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The chemical constituents of Gymnadenia conopsea were studied. Seven compds. were separated and purified by solvent extraction and liquid chromatog. on silica gel
column. The structures of the seven compds. were identified by spectral analyses. The seven compds. were identified as octadecane (1), eugenol (2), β-sitosterol (3), 5-hydroxymethylfuraldehyde (4), β-D-butylfructopyranoside (5), diosgenin (6), and fructose (7).
IT 67-47-0P, 5-(Hydroxymethyl)furaldehyde
RL: PUR (Purification or recovery); PREP (Preparation)
(chemical constituents of Gymnadenia conopsea)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 72 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:13471 CAPLUS
DOCUMENT NUMBER: 135:70930
TITLE: Antioxidants in medicinal plant extracts. A research study of the antioxidant capacity of Crataegus, Hamamelis and Hydrastis
AUTHOR(S): da Silva, Alda Pereira; Rocha, Rui; Silva, Cristina M. L.; Mira, Lurdes; Duarte, M. Filomena; Florencio, M. Helena
CORPORATE SOURCE: Laboratorio de Genetica da Faculdade de Medicina de Lisboa, Lisbon, 1600, Port.
SOURCE: Phytotherapy Research (2000), 14(8), 612-616
CODEN: PHYREH; ISSN: 0951-418X
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal

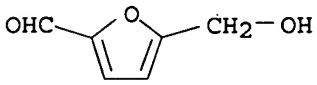
LANGUAGE: English

AB The antioxidant capacity of exts. of Crataegus oxyacantha, Hamamelis virginiana, Hydrastis canadensis, plants native to Europe and North America which have long been used in herbal medicine for the treatment of cardiac and circulatory functions, has been investigated. The total antioxidant potential conferred by all hydrogen donating antioxidants present in these exts. has been assessed by the ABTS assay and the relative order of antioxidant potential has been established. Gas chromatog. coupled to mass spectrometry (GC-MS) has been used for the chemical identification of the antioxidant volatile compds. present in the exts. The GC-MS data were related to the results obtained using the ABTS assay.

IT 67-47-0, 5-(Hydroxymethyl)-2-furancarboxaldehyde
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(antioxidant capacity of Crataegus, Hamamelis and Hydrastis and their components)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 73 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:111443 CAPLUS

DOCUMENT NUMBER: 132:127698

TITLE: Compositions containing 5-hydroxymethyl-2-furaldehyde for therapeutic use

INVENTOR(S): Yan, Yongqing; Zhu, Danni; Chen, Ting; Xia, Yun; Li, Zhiming; Ma, Xiaohong

PATENT ASSIGNEE(S): China Pharmacy Univ., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.
CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1182589	A	19980527	CN 1997-107191	19971113
CN 1068777	B	20010725		

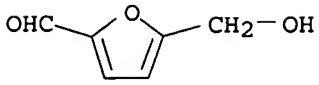
PRIORITY APPLN. INFO.: CN 1997-107191 19971113

AB 5-Hydroxymethyl-2-furaldehyde extracted from Shengmaisan [Chinese medicine] is useful for treatment of myocardial ischemia. Shengmaisan comprises Panax ginseng, Ophiopogon japonicus and Schisandra chinensis.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(compns. containing 5-hydroxymethyl-2-furaldehyde for therapeutic use)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 74 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:659396 CAPLUS
DOCUMENT NUMBER: 131:286826
TITLE: Preparation of amino acid-containing prodrugs of phosphorus-containing pharmaceuticals
INVENTOR(S): Zhou, Xiao-xiong; Johansson, Nils Gunnar; Wahling, Horst; Sund, Christian; Wallberg, Hans; Salvador, Lourdes; Lindstrom, Stefan
PATENT ASSIGNEE(S): Medivir AB, Swed.
SOURCE: PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9951613	A1	19991014	WO 1999-SE528	19990330
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9807267	A	19990215	ZA 1998-7267	19980813
WO 9909031	A1	19990225	WO 1998-SE1467	19980814
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6458772	B1	20021001	US 1999-249317	19990212
WO 9941275	A1	19990819	WO 1999-SE194	19990215
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2325523	A1	19991014	CA 1999-2325523	19990330
EP 1121366	A1	20010808	EP 1999-921327	19990330
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002510698	T	20020409	JP 2000-542334	19990330
IN 2000MN00432	A	20050318	IN 2000-MN432	20000925
AU 775578	B2	20040805	AU 2001-35224	20010417
AU 2003200551	A1	20030501	AU 2003-200551	20030218
PRIORITY APPLN. INFO.:			SE 1998-1216 A	19980403

ZA 1998-7267	A	19980813
WO 1998-SE1467	W	19980814
US 1999-249317	A	19990212
WO 1999-SE194	W	19990215
SE 1997-2957	A	19970815
SE 1997-4147	A	19971112
SE 1998-452	A	19980213
SE 1998-469	A	19980216
AU 1998-87548	A3	19980814
SE 1998-3438	A	19981007
AU 1999-32820	A3	19990215
WO 1999-SE528	W	19990330

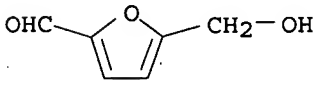
OTHER SOURCE(S): MARPAT 131:286826

AB Pharmaceutical compds. Drug-P(:O)-O-Linker(-R2')k-R2 [Drug-P(:O)-O- is the residue of a drug comprising a phosphonate, phosphinate, or phosphoryl function; R2 and R2' (if present) are independently the acyl residue of an aliphatic amino acid; Linker is an at least difunctional moiety comprising a first function ester-bonded to the phosphonate, phosphinate or phosphoryl function spaced from a second function ester-bonded to R2; and k is 1 or zero] were prepared which have enhanced bioavailability or other pharmacokinetic performance relative to the parent drug. Thus, 4-amino-1-hydroxybutylidene-1,1-bisphosphonic acid (alendronate) bis[2-methyl-2-(L-valyloxymethyl)propionyloxymethyl] ester was prepared and showed 42% bioavailability (vs. 2.2% for alendronate).

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of amino acid-containing prodrugs of phosphorus-containing pharmaceuticals)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 75 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:606966 CAPLUS

DOCUMENT NUMBER: 131:228952

TITLE: Preparation of erythromycin A macrolide LHRH antagonists

INVENTOR(S): Sauer, Daryl R.; Haviv, Fortuna; Randolph, John; Mort, Nicholas A.; Dalton, Christopher R.; Bruncko, Milan; Kaminski, Michele A.; Crawford, Bradley W.; Frey, Lisa Marie; Greer, Jonathan

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: U.S., 32 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5955440	A	19990921	US 1998-49963	19980327
CA 2325521	A1	19991007	CA 1999-2325521	19990311
WO 9950275	A2	19991007	WO 1999-US4658	19990311
WO 9950275	A3	20010222		

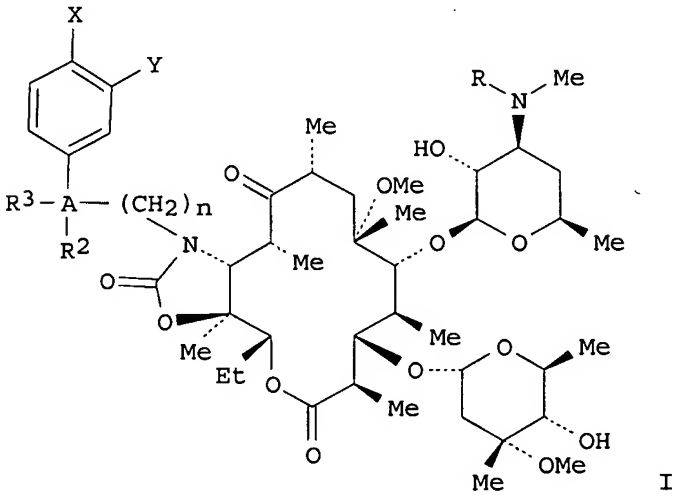
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9930674	A	19991018	AU 1999-30674		19990311
BR 9909080	A	20001212	BR 1999-9080		19990311
EP 1066304	A1	20010110	EP 1999-912259		19990311
EP 1066304	B1	20050223			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO					
TR 200002767	T2	20010521	TR 2000-2767		19990311
HU 2001002011	A2	20011128	HU 2001-2011		19990311
HU 2001002011	A3	20030728			
JP 2002509937	T	20020402	JP 2000-541178		19990311
AT 289609	T	20050315	AT 1999-912259		19990311
PT 1066304	T	20050630	PT 1999-912259		19990311
ES 2238828	T3	20050901	ES 1999-912259		19990311
IN 2000MN00403	A	20050715	IN 2000-MN403		20000915
MX 2000PA09423	A	20010419	MX 2000-PA9423		20000926
NO 2000004860	A	20001124	NO 2000-4860		20000927
BG 104844	A	20010731	BG 2000-104844		20001011
HK 1036284	A1	20051209	HK 2001-104717		20010709
PRIORITY APPLN. INFO.:			US 1998-49963	A	19980327
			WO 1999-US4658	W	19990311

OTHER SOURCE(S): MARPAT 131:228952

GI



I

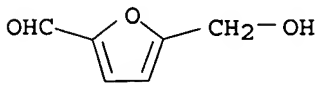
AB Macrolide erythromycins I (A is selected from the group consisting of: C, N, O; X and Y are independently hydrogen, halide, trifluoromethyl, alkoxy, alkyl, aryl; R is alkyl, cycloalkyl, heterocycle, substituted heterocycle, alkylcycloalkyl, substituted alkylcycloalkyl, alkylaryl, alkylheterocycle, alkenyl, alkynyl, C(S)NHR4, C(NR4)-NHR4, wherein R4 is hydrogen, alkyl, or aryl; R2 and R3 are hydrogen, Me, or R2 and R3 together with A to which they are attached may form a cyclic moiety, when A is C; R3 is absent when A is N; and n = 1-3) were prepared as antibacterial agents. Disclosed are 3'-N-desmethyl-3'-N-substituted-6-O-methyl-11-deoxy-11,12-cyclic carbamate erythromycin A derivs. which are antagonists of LH-releasing hormone

(LHRH). Also disclosed are pharmaceutical compns. comprising the compds., to methods of using the compds. and to the process of making the same. Thus, 3'-N-desmethyl-3'-N-cyclopentyl-11-deoxy-11-[carboxy-(3,4-dichlorophenethylamino)]-6-O-methyl-erythromycin A 11,12-(cyclic carbamate) was prepared as antibacterial agent. Representative compds. of the present invention were evaluated in in vitro tests for LHRH rat pituitary receptor binding (8.02 < pK1 < 9.49) and for LH inhibition from rat pituitary cells for antagonist potency (pA2).

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of erythromycin A macrolide LHRH antagonists)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 76 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:529169 CAPLUS
DOCUMENT NUMBER: 131:170633
TITLE: Preparation of amino acid-containing prodrugs
INVENTOR(S): Johansson, Nils Gunnar; Zhou, Xiao-xiong; Wahling, Horst; Sund, Christian; Wallberg, Hans; Salvador, Lourdes; Lindstrom, Stefan
PATENT ASSIGNEE(S): Medivir AB, Swed.
SOURCE: PCT Int. Appl., 167 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9941275	A1	19990819	WO 1999-SE194	19990215
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9807267	A	19990215	ZA 1998-7267	19980813
WO 9909031	A1	19990225	WO 1998-SE1467	19980814
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1123935	A2	20010816	EP 2001-103370	19980814
EP 1123935	A3	20010905		
EP 1123935	B1	20050413		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,				

	SI, FI, RO				
NZ 508502		A	20020426	NZ 1998-508502	19980814
CN 1872869		A	20061206	CN 2006-10099722	19980814
ZA 9901148		A	19990812	ZA 1999-1148	19990212
CA 2318978		A1	19990819	CA 1999-2318978	19990215
AU 9932820		A	19990830	AU 1999-32820	19990215
AU 754733		B2	20021121		
EP 1054891		A1	20001129	EP 1999-932500	19990215
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2325523		A1	19991014	CA 1999-2325523	19990330
WO 9951613		A1	19991014	WO 1999-SE528	19990330
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1121366		A1	20010808	EP 1999-921327	19990330
R:	AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002510698		T	20020409	JP 2000-542334	19990330
CA 2362135		A1	20000817	CA 1999-2362135	19990818
WO 2000047561		A1	20000817	WO 1999-SE1403	19990818
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9956658		A	20000829	AU 1999-56658	19990818
AU 770801		B2	20040304		
EP 1150956		A1	20011107	EP 1999-943591	19990818
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002536435		T	20021029	JP 2000-598482	19990818
IN 2000MN00218		A	20050304	IN 2000-MN218	20000726
IN 2000MN00432		A	20050318	IN 2000-MN432	20000925
AU 775578		B2	20040805	AU 2001-35224	20010417
IN 2001MN00927		A	20050304	IN 2001-MN927	20010802
US 2002128301		A1	20020912	US 2001-927254	20010810
AU 2003200551		A1	20030501	AU 2003-200551	20030218

PRIORITY APPLN. INFO.:	SE 1998-452	A	19980213
	SE 1998-469	A	19980216
	SE 1998-1216	A	19980403
	ZA 1998-7267	A	19980813
	WO 1998-SE1467	W	19980814
	SE 1998-3438	A	19981007
	SE 1997-2957	A	19970815
	SE 1997-4147	A	19971112
	AU 1998-87548	A3	19980814
	CN 2003-2003157988	A3	19980814
	EP 1998-939041	A3	19980814
	NZ 1998-502837	A1	19980814
	US 1999-249317	A	19990212
	AU 1999-32820	A3	19990215
	WO 1999-SE194	W	19990215
	WO 1999-SE528	W	19990330
	WO 1999-SE1403	W	19990818

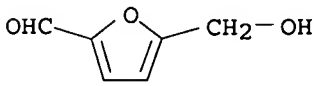
OTHER SOURCE(S): MARPAT 131:170633

AB Pharmaceutical compds. or intermediates in their synthesis D*-Linker*(R2')k-R2 [R2 and R2' (if present) is the amide or ester residue of an aliphatic amino acid, k is 0 or 1, D* is a drug residue bearing an accessible function selected from amine, hydroxy and carboxy, or a group amenable to attachment to the accessible function, Linker* is an at least bifunctional linker comprising a first function bound to the accessible function spaced from a second function forming an amide or acyl bond with the aliphatic amino acid] were prepared Thus, 2',3'-dideoxy-3'-fluoro-5'-O-{3-[1,3-bis(L-valyloxy)-2-propyloxycarbonyl]propanoyl}guanosine was prepared and shown to provide significantly enhanced oral bioavailability relative to the active metabolite 2',3'-dideoxy-3'-fluoroguanosine.

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of amino acid-containing prodrugs)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 77 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:600014 CAPLUS

DOCUMENT NUMBER: 129:245410

TITLE: Preparation of indolopyrrolocarbazole derivatives having glucopyranosyl group and antitumor agents containing them

INVENTOR(S): Kojiri, Katsuhisa; Kondo, Hisao; Arakawa, Koji; Ookubo, Mitsuru; Suda, Hiroyuki

PATENT ASSIGNEE(S): Banyu Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

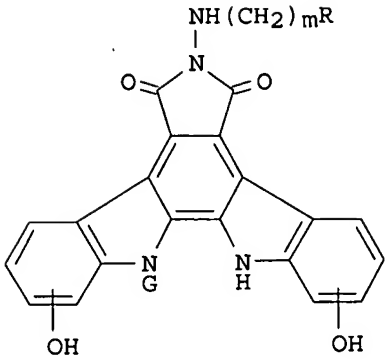
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10245390	A	19980914	JP 1997-61875	19970228
JP 3536574	B2	20040614		
JP 2004099617	A	20040402	JP 2003-351296	20031009

PRIORITY APPLN. INFO.: JP 1997-61875 A3 19970228

OTHER SOURCE(S): MARPAT 129:245410

GI



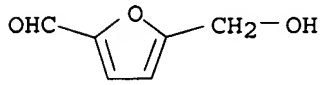
I

AB The derivs. I (R = Ph, naphthyl, pyridyl, furyl, thienyl, which is substituted with 1-2 OH, lower alkoxy, lower hydroxyalkyl, or lower hydroxyalkenyl; if R has a lower alkoxy, then R is also has the other substituent; m = 1-3; G = β-D-glucopyranosyl; 2 OH groups are on the 1- and 11- or 2- and 10-positions of the indolopyrrolocarbazole ring) or their pharmaceutically acceptable salts are prepared The antitumor agents contain I or the salts. 2,10-I [(CH2)mR = CH2C6H3(OH)2-3,5] (preparation given) inhibited growth of human gastric cancer MX-1 cells s.c. transplanted into nude mice.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of glucopyranosylindolopyrrolocarbazole derivs. as antitumor agents)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 78 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:572297 CAPLUS

DOCUMENT NUMBER: 129:203270

TITLE: Preparation of prolinamide derivatives as thrombin inhibitors

INVENTOR(S): Lumma, William C.; Tucker, Thomas J.; Witherup, Keith M.; Brady, Stephen F.; Whitter, Willie L.; Vacca, Joseph P.; Coburn, Craig; Shafer, Jules A.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 24 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

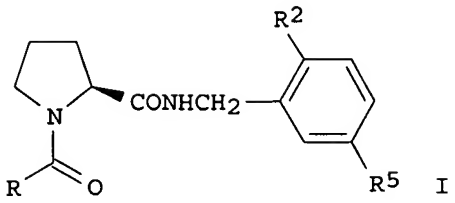
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5798377	A	19980825	US 1996-734148	19961021

PRIORITY APPLN. INFO.: US 1996-734148 19961021

OTHER SOURCE(S): MARPAT 129:203270

GI



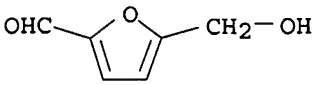
I

AB Prolinamide derivs. I (R = RaRbCHCHX, where Ra and Rb = H, alkyl, aryl, cycloalkyl or RaRbC = cycloalkyl, X = NHRc, where Rc = H, Me, hydroxy-, carboxy- or carboxamidoalkyl, phenylalkylsulfonyl, etc.; R2 and R5 = H, alkyl, alkoxy, halo, carboxy, etc.) or their pharmaceutically acceptable salts were prepared as thrombin inhibitors. Thus, D-β,β-diphenylala,Pro-N-(2,5-dichlorophenyl)methylamide, prepared by amidation of the proline derivative, showed Ki >10 nM and <500 nM for inhibition of thrombin.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of prolinamide derivs. as thrombin inhibitors)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 79 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:552780 CAPLUS

DOCUMENT NUMBER: 130:7325

TITLE: Research on chemical dynamic changes and drug efficacy of Shengmaisan (SMS) complex prescription (II)

AUTHOR(S): Zhu, Danni; Li, Zhiming; Yan, Yongqing; Zhu, Jinggang

CORPORATE SOURCE: Department of Chinese Medicinal Prescription, China Pharmaceutical University, Nanjing, 210038, Peop. Rep. China

SOURCE: Zhongguo Zhongyao Zazhi (1998), 23(5), 291-293
CODEN: ZZZAE3; ISSN: 1001-5302

PUBLISHER: Zhongguo Yaoxuehui Zhongguo Zhongyi Yanjiuyuan Zhongya Yanjiuso

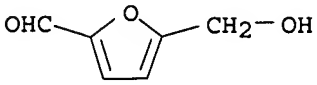
DOCUMENT TYPE: Journal

LANGUAGE: Chinese

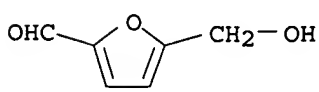
AB The content changes of 5-hydroxymethyl-2-furaldehyde (5-HMF), a new compound, were reported in the previous paper and the content changes of 5-HMF in eight prescriptions of different composition were further determined by HPLC with a view to find the chemical dynamic changes and compatibility of medicines. The contents of 5-HMF in different combinations of Radix Ophiopogonis and Fructus Schisandrae, different boiling times and boiling frequency were examined by HPLC on Shim-pack CLC-ODS column with CH3OH:H2O (40:60) at 289 nm. The results indicated that 5-HMF was produced in the boiling process of Radix Ophiopogonis and Fructus Schisandra combined. The contents of 5-HMF could increase with the increase of Radix Ophiopogonis amount, reaching the highest value after 1.5 h boiling and two times of boiling.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(chemical dynamic changes and drug efficacy of Shengmaisan, a combination of Ophiopogon root and Schisandra fruits)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 80 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:214944 CAPLUS
DOCUMENT NUMBER: 128:299414
TITLE: Effects of Shimotsu-to on the microcirculation of the bulbar conjunctiva and hemorheological parameters in normal subjects
AUTHOR(S): Kojima, S.; Hikiami, H.; Yang, Q.; Matsumi, S.; Umeda, Y.; Terasawa, K.
CORPORATE SOURCE: Central Research Laboratories, Yomeishu Seizo Co., Ltd., Nagano, 399, Japan
SOURCE: Phytomedicine (1998), 5(1), 19-24
CODEN: PYTOEY; ISSN: 0944-7113
PUBLISHER: Gustav Fischer Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of "Shimotsu-to" (Si-Wu-Tang in Chinese), one of the most important prescriptions for "ketsukyo" and "oketsu" syndrome in traditional Chinese medicine, on the microcirculation of bulbar conjunctiva and the hemorheol. parameters were examined By HPLC the mean constituents were determined After a h of oral administration of Shimotsu-to extract, the blood flow rate and the blood flow volume increased and the DEA (maximum diameter of the column of intravascular erythrocyte aggregation) decreased. The whole blood viscosity declined at middle and high shear rates, but both the plasma viscosity and the erythrocyte deformability were not effected. These results suggest that Shimotsu-to has a salutary effect on the microcirculation through a decrease in the whole blood viscosity.
IT 67-47-0, 5-Hydroxymethyl-2-furfural
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(Shimotsu-to constituents and hemorheol. effects)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

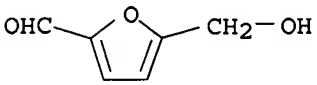


L3 ANSWER 81 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:116570 CAPLUS
DOCUMENT NUMBER: 128:172224
TITLE: Identification of a pill for eye-diseases from traditional Chinese medicine
AUTHOR(S): Martens-Lobenhoffer, J.; Behrens-Baumann, W.; Loesche, D.; Meyer, F. P.

CORPORATE SOURCE: Institute Clinical Pharmacology, Otto-von-Guericke-University, Magdeburg, D-39120, Germany
SOURCE: Pharmazie (1998), 53(2), 136-137
CODEN: PHARAT; ISSN: 0031-7144
PUBLISHER: Govi-Verlag Pharmazeutischer Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The "pill 7" used in the traditional Chinese medicine was analyzed for components. Benzoic, palmitic, stearic, oleic, linoleic acid, β-sitosterol, α-tocopherol, germacrene D (a natural sesquiterpene), 5-hydroxymethyl-2-furaldehyde, diisooctyl phthalate, catechin tannins, lignin, starch, crystals, parts of vessels, and sclerenchym fibers were found.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(identification of a pill for eye-diseases from traditional Chinese medicine)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 82 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:400089 CAPLUS
DOCUMENT NUMBER: 127:13457
TITLE: Peptide derivative thrombin inhibitors, preparation and activity thereof, and pharmaceutical compositions
INVENTOR(S): Lumma, William C.; Tucker, Thomas J.; Witherup, Keith M.; Brady, Stephen F.; Whitter, Willie L.; Vacca, Joseph P.; Coburn, Craig; Shafer, Jules A.
PATENT ASSIGNEE(S): Merck and Co., Inc., USA
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9715190	A1	19970501	WO 1996-US16865	19961021
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2233860	A1	19970501	CA 1996-2233860	19961021
AU 9674634	A	19970515	AU 1996-74634	19961021
AU 709088	B2	19990819		
EP 858262	A1	19980819	EP 1996-936804	19961021
EP 858262	B1	20021204		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 11514378	T	19991207	JP 1996-516702	19961021

AT 228760	T	20021215	AT 1996-936804		19961021
ES 2186807	T3	20030516	ES 1996-936804		19961021
PRIORITY APPLN. INFO.:			US 1995-6076P	P	19951024
			GB 1996-5163	A	19960312
			US 1996-23164P	P	19960805
			WO 1996-US16865	W	19961021

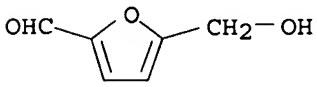
OTHER SOURCE(S): MARPAT 127:13457

AB Peptide derivs. (Markush included) are prepared which inhibit human thrombin. The compds. of the invention may be used for inhibition of thrombus formation. Preparation of e.g. Boc-D-cyclohexylglycine-proline-N-[2-(O-ethylacetamido)-5-chloro]benzylamide is described. Biol. activity of compds. of the invention is reported, and tablet and i.v. formulations are presented.

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; peptide derivative thrombin inhibitors, preparation and activity thereof, and pharmaceutical compns.)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 83 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

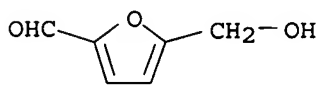
ACCESSION NUMBER:	1996:668158 CAPLUS
DOCUMENT NUMBER:	125:308780
TITLE:	Study on processing of Rehmannia glutinosa Libosch. II. Influence of processing on the reducing sugar content
AUTHOR(S):	Liu, Meili; Bai, Rongzhi; Feng, Hanlin
CORPORATE SOURCE:	Tianjing Inst. of Pharmaceutics, Tianjing, 300193, Peop. Rep. China
SOURCE:	Zhongcaoyao (1996), 27(8), 470 CODEN: CTYAD8; ISSN: 0253-2670
PUBLISHER:	Guojia Yiyao Guanliju Tianjin Yaowu Yanjiuso
DOCUMENT TYPE:	Journal
LANGUAGE:	Chinese

AB The Rehmannia glutinosa before and after steaming had different pharmaceutical features. Study on the alteration of reducing sugar content during processing showed that maximum reducing sugar content occurred at the 4th h of pressured steaming or the 24th h of atmospheric steaming. Since part of the polysaccharides and holosides were hydrolyzed to reducing sugar during the process of steaming, the reducing sugar content was increased. But long time steaming caused transformation of reducing sugar to 5-hydroxymethyl furfural, which made the product bitter. The results suggest that proper time course of steaming is important and reducing sugar content can be a valid quality control standard

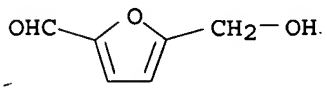
IT 67-47-0, 5-Hydroxymethyl furfural
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(steaming of Rehmania glutinosa effect on reducing sugars)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

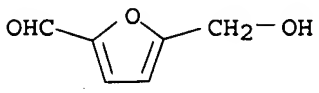


L3 ANSWER 84 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:123378 CAPLUS
DOCUMENT NUMBER: 124:211789
TITLE: The effect of productive technologic processes on 5-hydroxymethylfurfural in glucose injection solution
AUTHOR(S): Liu, Laer; Chen, Lixin; Zhang, Zheng; Peng, Chengsheng; Xie, Qiuyuan; Liu, Fengqin; Wang, Bin
CORPORATE SOURCE: 163 Hospital PLA, Changsha, 410003, Peop. Rep. China
SOURCE: Zhongguo Yaoxue Zazhi (Beijing) (1995), 30(9), 553-5
CODEN: ZYZAEU; ISSN: 1001-2494
PUBLISHER: Zhongguo Yaoxuehui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Factors affecting 5-hydroxymethylfurfural content were estimated by orthodox cross designed expts. The main factors involved was the sterilizing time, temperature and position in the autoclave. The effect of pH was insignificant, but storage time showed no influence. Concentrated mother solns. prepared overnight contained more 5-HMF even after sterilization.
IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); PEP (Physical, engineering or chemical process); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(production technol. processes effect on hydroxymethylfurfural in glucose injection solution)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

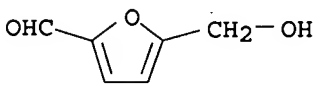


L3 ANSWER 85 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:81330 CAPLUS
DOCUMENT NUMBER: 124:192929
TITLE: Simultaneous determination of sugars and their degradation product 5-hydroxymethylfurfural in foods and pharmaceuticals by high-performance liquid chromatography
AUTHOR(S): Yuan, Jianping; Guo, Siyuan; Li, Lin
CORPORATE SOURCE: Coll. Light Ind. Food Eng., South China Univ. Technol., Canton, 510641, Peop. Rep. China
SOURCE: Fenxi Huaxue (1996), 24(1), 57-60
CODEN: FHHHDT; ISSN: 0253-3820
PUBLISHER: Zhongguo Huaxuehui Fenxi Huaxue Bianji Weiyuanhui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB 5-Hydroxymethylfurfural (5-HMF) is a degradation product of sugars. A HPLC method for the simultaneous determination of sucrose, glucose, fructose and 5-HMF in foods and pharmaceuticals by HPLC is reported. 5-HMF and sugars are separated on an Aminex HPX-87H column (300 + 7.8 mm) with acetonitrile-0.01 mol/L H2SO4 (40:60) as mobile phase and with dual detectors, a UV detector (280 nm) to measure 5-HMF, and a refractometer to measure sugars.
IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); ANST (Analytical study)
(simultaneous determination of sugars and their degradation product 5-hydroxymethylfurfural in foods and pharmaceuticals by HPLC)
RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 86 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:27558 CAPLUS
DOCUMENT NUMBER: 124:126971
TITLE: Chemical studies on crude drug processing. X. On the constituents of Rehmanniae Radix (4): comparison of the constituents of various Rehmanniae Radixes originating in China, Korea, and Japan
AUTHOR(S): Kitagawa, Isao; Fukuda, Youichi; Taniyama, Toshio; Yoshikawa, Masayuki
CORPORATE SOURCE: Fac. Pharmaceutical Sci., Osaka Univ., Osaka, 565, Japan
SOURCE: Yakugaku Zasshi (1995), 115(12), 992-1003
CODEN: YKKZAJ; ISSN: 0031-6903
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB In order to characterize the chemical change of their constituents during the processing of various Rehmanniae Radixes, we have investigated the constituents by comparing with those of Chinese Juku-jio (variously processed root of Chinese Rehmannia sp.), Korean Kan-jio (dried root), and Japanese Juku-jio (steamed root), prepared from Rehmannia glutinosa Libosch. var. purpurea Makino (Akaya-jio in Japanese) and Rehmannia glutinosa Libosch. forma hueichingensis Hsiao (Kaikei-jio in Japanese). During processing in preparation of Kan-jio and Juku-jio from Sho-jio, jio-serebroside and acetoside were isolated, and the iridoid glycosides were completely degraded or their contents decreased remarkably. Quant. anal. by means of gas liquid chromatog. (GLC) has confirmed that the contents of monosaccharides and oligosaccharides in Kan-jio and Juku-jio increased more than those in Sho-jio. During the course of these studies, a new iridoid glycoside named 6'-O-acetylcatalpol was isolated from Japanese Sho-jio and the structure was determined
IT 67-47-0, 2-Furancarboxaldehyde, 5-hydroxymethyl-
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(comparison of the constituents of various Rehmanniae Radixes from China, Korea, and Japan)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 87 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:626552 CAPLUS
DOCUMENT NUMBER: 123:65648
TITLE: A study of decomposition of intravenous sucrose infusions
AUTHOR(S): Rathi, R.; Dhaneshwar, S. R.
CORPORATE SOURCE: Dept. Pharmacy, SGSITS, Indore, 452 003, India

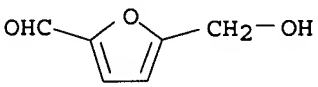
SOURCE: Eastern Pharmacist (1995), 38(448), 133-5
CODEN: EAPHA6; ISSN: 0012-8872
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A practical approach for studying the breakdown of refined sugar solns. under different sterilizing conditions has been developed using an autoclave. The effects of presence of sodium-chloride, E.D.T.A., pH, temperature, concentration and the time of heating on the inversion of refined sugar in aqueous solns. were studied. Exptl. findings showed that formation of 5-hydroxymethyl-2-furfuraldehyde (5-HMF) is less if refined sugar solution is subjected to sterilizing condition of lower temperature for longer time rather than vice versa. Use of sodium chloride, EDTA, sodium sulfite checks the rate of inversion, and also effects the formation of 5-HMF in refined sugar solution Adjustment of pH of refined sugar solution (before autoclaving) to 3 results in less 5-HMF being produced, and inversion can be carried out at lower temps. compared to unadjusted solns. Assay procedure is correlated with invert sugar scale in polarimeter to simplify the procedure and for saving time.

IT 67-47-0, 5-Hydroxymethyl-2-furfuraldehyde
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(study of decomposition of i.v. sucrose infusions)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 88 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:449749 CAPLUS
DOCUMENT NUMBER: 122:222591

TITLE: Characteristic component of Rehmanniae Radix Preparata compared to Rehmannaie Radix and Rehmanniae Radix Crudus

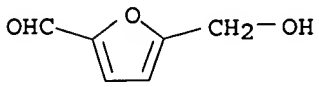
AUTHOR(S): Hong, Sun Pyo; Kim, Young Chul; Kim, Kyeong Ho; Park, Jeong Hill; Park, Man Ki
CORPORATE SOURCE: College Pharmacy, Seoul National University, Seoul, 151-742, S. Korea

SOURCE: Analytical Science & Technology (1993), 6(4), 401-4
CODEN: ASCTET; ISSN: 1225-0163
PUBLISHER: Korean Society of Analytical Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English

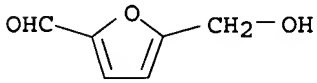
AB Rehmanniae Radix Preparata is manufactured with Rehmanniae Radix according to KP V. For quality control of Rehmanniae Radix Preparata, its standard component is required. The methanol exts. of Rehmanniae Radix crudus, Rehmanniae Radix, Rehmanniae Radix preparata were divided into the three groups of ether, butanol and aqueous fraction by liquid-liquid separation In the comparative TLC of the ether fraction, the characteristic component of Rehmanniae Radix preparata was found. The ether fraction was evaporated and separated on the silica gel column with chloroform-methanol and further separated by silica gel TLC with chloroform-methanol-water. The component was elucidated as 5-(hydroxymethyl)-2-furancarboxaldehyde (5-HMF). 5-HMF was not found in Rehmanniae Radix crudus and found in Rehmanniae radix is much less quantities than Rehmanniae Radix Preparata.

IT 67-47-0, 5-(Hydroxymethyl)-2-furancarboxaldehyde
RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study,

unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(Rehmanniae Radix characteristic component)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 89 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:449469 CAPLUS
DOCUMENT NUMBER: 122:222659
TITLE: Influence of intermediate pH of glucose injection on glucose content, pH and 5-hydroxymethylfurfural content of final product
AUTHOR(S): Zhang, Wen; Jiang, Lei; Ma, Yan; Guo, Ningning; Jiang, Guohui; Zhang, Weicong
CORPORATE SOURCE: Laiyang Central Hosp., Laiyang, 265200, Peop. Rep. China
SOURCE: Zhongguo Yaoxue Zazhi (Beijing) (1995), 30(2), 90-1
CODEN: ZYZAEU; ISSN: 1001-2494
PUBLISHER: Zhongguo Yaoxuehui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The effects of intermediate pH of glucose injection during preparation process on the main indexes, the glucose content, pH and 5-hydroxymethylfurfural content, were studied for control of final product. The results showed that the intermediate pH between 3.80-4.00 might be selected.
IT 67-47-0, 5-Hydroxymethylfurfural
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(pH effect on stability of glucose injections)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



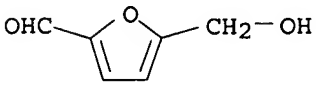
L3 ANSWER 90 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:422191 CAPLUS
DOCUMENT NUMBER: 122:196660
TITLE: Processing of adhesive Rehmannia (Rehmannia glutinose). I. Extraction, separation, identification and assay of 5-hydroxymethyl-furfurol
AUTHOR(S): Liu, Meili; Bai, Mei; Bai, Rongzhi; Feng, Hanlin
CORPORATE SOURCE: Tianjin Inst. Pharmaceutical Res., State Pharmaceutical Adm. China, Tianjin, 300193, Peop. Rep. China
SOURCE: Zhongcaoyao (1995), 26(1), 13-14
CODEN: CTYAD8; ISSN: 0253-2670
PUBLISHER: Guojia Yiyao Guanliju Tianjin Yaowu Yanjiuso
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB In the study of processing of Dihuang, a traditional Chinese drug composed of the rhizome of Rehmannia glutinose Libosch, attention was paid to reveal the chemical changes occurred in the course of processing. In order

to find some clues for the process control, changes in the TLC spectrograms were examined and one of the component peak was found changing gradually as the processing went on. Phytochem. separation and identification revealed that the component peak features 5-hydroxymethylfurfurol (5-HMF). TLC spectrometric estimation of the 5-HMF contents was developed and used to monitor the process. It was found that the 5-HMF content at the end of processing was 20 times higher than that at the start. Biol. assay indicated that 5-HMF possesses marked antiplatelet activity, which supports the use of Dihuang as a blood activating agent in traditional Chinese medicine.

IT 67-47-0, 5-(Hydroxymethyl)-2-furfural
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); FMU (Formation, unclassified); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence)
(hydroxymethylfurfurol content in processing of Dihuang (Rehmannia glutinosa rhizome))

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

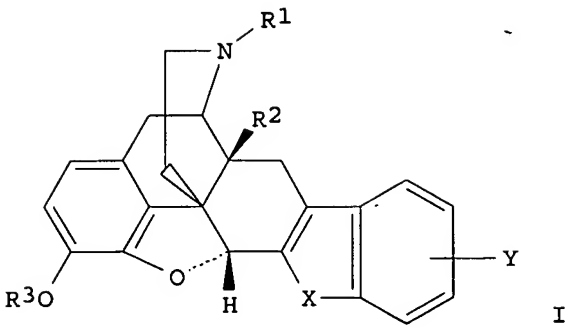


L3 ANSWER 91 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:205989 CAPLUS
DOCUMENT NUMBER: 122:265742
TITLE: Opioid agonist compounds as analgesics
INVENTOR(S): Dappen, Michael S.; Pitzele, Barnett S.; Rafferty, Michael F.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: U.S., 21 pp. Cont.-in-part of U.S. 5,225,417.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 5354863	A	19941011	US 1993-21694		19930224
US 5225417	A	19930706	US 1992-823221		19920121
US 5436249	A	19950725	US 1994-243661		19940516
PRIORITY APPLN. INFO.:			US 1992-823221	A2	19920121
			US 1993-21694	A1	19930224

OTHER SOURCE(S): MARPAT 122:265742
GI



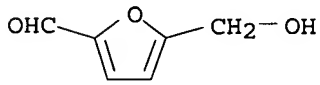
I

AB The present invention provides novel substituted opioid analgesic compds. I (R1 = CN; R2 = OR4 wherein R4 = O2CH, O2C-C1-5-alkyl; R3 = CHO, CO-C1-5-alkyl or -alkoxy; X = O, Y = H) which are opioid agonists, and which are useful as analgesic agents for the treatment of pain, pharmaceutical compns. comprising a therapeutically-effective amount of a compound I in combination with a pharmaceutically-acceptable carrier, and a method for eliminating or ameliorating pain in an animal comprising administering a therapeutically-effective amount of a compound of I to the animal. PBQ writhing assay at 10 and/or 30 mpk/g body weight (i.g. or s.c.): 4/10 mice exhibited inhibition of writhing. Tail flick assay: active at a dose of ca. 10 nmol. Opiate binding assay: mean IC50 (nM) values of 1 to >10000 with μ/δ ratios of 1.2 to >850.

IT 67-47-0, 5-(Hydroxymethyl)furfural
RL: RCT (Reactant); RACT (Reactant or reagent)
(opioid agonist compds. as analgesics)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 92 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:486211 CAPLUS

DOCUMENT NUMBER: 121:86211

TITLE: Hydroxymethylfurfural, a possible basic chemical for industrial intermediates

AUTHOR(S): Kunz, Markwart

CORPORATE SOURCE: Inst. Landwirtschaftliche Technol. Zuckerind., Tech. Univ. Braunschweig, Braunschweig, 3300, Germany

SOURCE: Studies in Plant Science (1993), 3(Inulin and Inulin-Containing Crops), 149-60
CODEN: SPLCEU; ISSN: 0928-3420

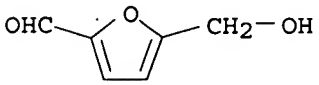
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fructose ex inulin can be readily converted to the basic chemical hydroxymethylfurfural (HMF). Due to its various functionalities HMF, in its turn, could be utilized to produce a wide range of chemical intermediates or end-products. Among the reactions possible, some are discussed to illustrate the potential to open up important fields of industrial application of these HMF-derived chems., for instance as polymers, surfactants, solvents, pharmaceuticals and plant protection agents. In particular polymers seem to constitute a very interesting area of potential applications. Among these polymers, polyesters and

polyamides, the latter being comparable with the terephthalic acid- and isophthalic acid-based polyamides Kevlar and Nomex, are worth mentioning. In addition, conducting polyene-like furan polymers seem to be promising, especially for their potential application in batteries, sensors and switches. However, prerequisite for a substantial future role of HMF as a basic chemical is a low price. It means that, if fructose ex inulin should be used for HMF production, the price level for inulin should be roughly DM 1000 per ton.

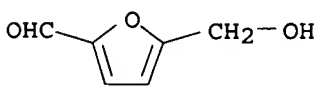
IT 67-47-0, Hydroxymethylfurfural
RL: USES (Uses)
(use of fructose-derived, in organic and polymer synthesis)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 93 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:161915 CAPLUS
DOCUMENT NUMBER: 120:161915
TITLE: Semiautomatic determination of furanic aldehydes in food and pharmaceutical samples by a stopped-flow injection analysis method
AUTHOR(S): Espinosa-Mansilla, A.; Munoz de la Pena, A.; Salinas, F.
CORPORATE SOURCE: Dep. Anal. Chem., Univ. Extremadura, Badajoz, 06071, Spain
SOURCE: Journal of AOAC International (1993), 76(6), 1255-61
CODEN: JAINEE; ISSN: 1060-3271
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A kinetic study of the reactions of 5-hydroxymethyl-2-furfuraldehyde and furfural with 2-thiobarbituric acid (TBA) by a stopped-flow flow injection anal. technique has been undertaken. A semiautomatic method for the anal. determination of these furanic aldehydes is proposed on the basis of reaction with TBA. The proposed stopped-flow method was successfully applied to several com. pharmaceutical prepns. and food samples. The procedure is faster than the earlier procedure for determination of these compds. in foods and pharmaceuticals.

IT 67-47-0, 5-Hydroxymethyl-2-furfuraldehyde
RL: ANT (Analyte); ANST (Analytical study)
(determination of, by stopped-flow injection, in food and pharmaceutical samples)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



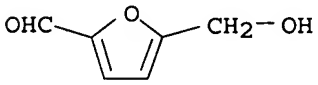
L3 ANSWER 94 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:144340 CAPLUS
DOCUMENT NUMBER: 120:144340
TITLE: Stability-indicating HPLC assay for paracetamol,

guaiphenesin, sodium benzoate and oxomemazine in cough syrup
AUTHOR(S): Hewala, Ismail I.
CORPORATE SOURCE: Fac. Pharm., Univ. Alexandria, Alexandria, 21521, Egypt
SOURCE: Analytical Letters (1994), 27(1), 71-93
CODEN: ANALBP; ISSN: 0003-2719
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A stability-indicating, specific, sensitive and validated reversed-phase HPLC assay for paracetamol, guaiphenesin, sodium benzoate and oxomemazine in the presence of degradation products, i.e. 4-aminophenol and guaiacol, as well, as the co-formulated adjuvants and 5-hydroxymethylfurfural, a commonly formed compound in syrups during formulation and/or storage of pharmaceutical syrups, has been developed to allow simultaneous determination of these compds. in a cough syrup. The HPLC method includes the use of a two-line solvent delivery system. The specificity, precision in term of both repeatability (i.e. intraday precision) and reproducibility (i.e. interday precision), limit of detection of the degradation products and ruggedness due to column to column batch and source variation have been discussed. The developed method has been applied for the determination of the main drugs and their degradation products in freshly prepared as well as in stored samples of cough syrup.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in cough syrup as degradation product, by stability-indicating reversed-phase HPLC)

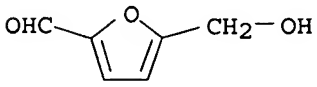
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 95 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:62086 CAPLUS
DOCUMENT NUMBER: 120:62086
TITLE: Studies on aldose reductase inhibitors from natural products. V. Active components of Hachimijiogan (Kampo medicine)
AUTHOR(S): Shimizu, Mineo; Zenko, Yutaka; Tanaka, Ryoichi; Matsuzawa, Tomoko; Morita, Naokata
CORPORATE SOURCE: Fac. Pharm. Sci., Toyama Med. and Pharm. Univ., Sugitani, 930-01, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1993), 41(8), 1469-71
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Aldose reductase (AR) inhibitory activity-directed fractionation of Hachimijiogan led to the isolation of 5-(hydroxymethyl)-2-furfuraldehyde (I) and ellagic acid (II). II was reported to be a strong AR inhibitor in this series of study on AR inhibitors, but I is the first isolation from a natural source and as an AR inhibitor. The AR inhibitory activity of the 8 crude drugs which constitute Hachimijiogan, and a comparison of their components by TLC, were also examined Corni fructus was one of the important drugs having an AR inhibitory effect, and only in this drug were I and II present together.

IT 67-47-0, 5-(Hydroxymethyl)-2-furfuraldehyde
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(of Hachimijiogan, aldose reductase inhibitory activity of)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



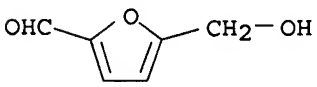
L3 ANSWER 96 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:33982 CAPLUS
DOCUMENT NUMBER: 120:33982
TITLE: Production of chlorine dioxide solution having low chloride ions
INVENTOR(S): Roozdar, Habib
PATENT ASSIGNEE(S): ARCO Research Co., Inc., USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9317960	A1	19930916	WO 1993-US2015	19930304
W: CA				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 629177	A1	19941221	EP 1993-907256	19930304
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.:
US 1992-846468 A 19920304
US 1992-980262 A 19921123
WO 1993-US2015 W 19930304

AB The process comprises forming a solution mixture of a salt of chlorite and a low pKa biol. compatible acid to produce chlorous acid and adding a disproportionation agent into the solution to enhance chlorous acid disproportionation to ClO2. The residual chloride ions in the solution is minimized and the disinfecting solution can be used in the food processing, drinking water, pharmaceutical production, and medical and dental related industries.

IT 67-47-0, 5-Hydroxymethyl-2-furfural
RL: USES (Uses)
(in chloride-low chlorine dioxide manufacture from chlorite)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



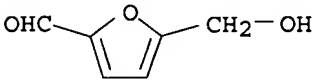
L3 ANSWER 97 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:219948 CAPLUS
DOCUMENT NUMBER: 118:219948
TITLE: Detection and determination of interfering 5-hydroxymethylfurfural in the analysis of

caramel-colored pharmaceutical syrups
AUTHOR(S): Hewala, I. I.; Zoweil, A. M.; Onsi, S. M.
CORPORATE SOURCE: Fac. Pharm., Univ. Alexandria, Alexandria, 21521, Egypt
SOURCE: Journal of Clinical Pharmacy and Therapeutics (1993), 18(1), 49-53
CODEN: JCPTED; ISSN: 0269-4727
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A comparison between different caramels described for use in the pharmaceutical industry is presented. An interfering substance, 5-hydroxymethylfurfural (5-HMF), was detected in some caramels. Conditions and proofs for the formation of 5-HMF are presented. Interference by 5-HMF during the anal. of the active drugs and the possibility of interaction with the active drugs during the shelf-life of the drug formulation are discussed. A limit test for 5-HMF in caramel was developed. The test depends on measuring the difference in absorbance between two equimolar solns. of caramel, one of which contains sodium borohydride. The test is sensitive and selective for the detection and determination of trace amts. of 5-HMF without interference from the brown products of caramel.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in caramel-colored syrups, spectrophotometric)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

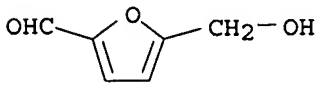


L3 ANSWER 98 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:197888 CAPLUS
DOCUMENT NUMBER: 118:197888
TITLE: Optimization of moist heat-sterilization of glucose infusions. The effect of different Fo-values on the pH and 5-hydroxymethyl-2-furaldehyde content of the solutions
AUTHOR(S): Mannermaa, J. P.; Yliruusi, J.; Kanerva, U.
CORPORATE SOURCE: Orion Corp. Farmos, Oulu, SF-90650, Finland
SOURCE: Pharmazeutische Industrie (1992), 54(8), 729-32
CODEN: PHINAN; ISSN: 0031-711X
DOCUMENT TYPE: Journal
LANGUAGE: English

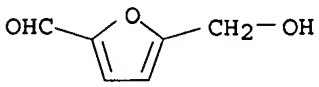
AB The effect of steam sterilization efficiency (Fo value) on 5-hydroxymethyl-2-furaldehyde (I) formation and the pH of glucose (II) infusions containing 5, 20, or 40% II and bottled in 500-mL glass bottles was studied for Fo values of 1.5, 5, 15, 50, and 150 min. Thus, at lower Fo, I levels were independent of the II concentration, but at Fo values of 50 or 150 min, concentration-dependencies were observed At the highest Fo, a decrease in I level with increasing II was seen. HPLC demonstrated I as practically the sole (>99%) degradation product of II. With the exception of solns. sterilized to Fo values of 5-15 min, infusion pH generally decreased. For 20% II solns. sterilized than stored for 30 days, a pH decrease of .apprx.0.2 units was observed

IT 67-47-0, 5-Hydroxymethyl-2-furaldehyde
RL: FORM (Formation, nonpreparative)

(formation of, during steam sterilization of glucose infusion solns., sterilization efficiency effect on pH and)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 99 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:537547 CAPLUS
DOCUMENT NUMBER: 117:137547
TITLE: Toxicity potential of compounds found in parenteral solutions with rubber stoppers
AUTHOR(S): Danielson, James W.
CORPORATE SOURCE: Steril. Anal. Res. Cent., Food Drug Adm., Minneapolis, MN, USA
SOURCE: Journal of Parenteral Science and Technology (1992), 46(2), 43-7
CODEN: JPATDS; ISSN: 0279-7976
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Leached stopper components found in parenteral solns. produced by several manufacturers were identified and quantitated. Their toxicity potential was determined by comparing the types and quantities of the leached components with known toxicity levels and/or harmful effects. Toxicity potentials for benzaldehyde, 2-butoxyethanol, cyclohexanone, ethylbenzene, 1,1,2,2-tetrachloroethane, and tetrachloroethylene are listed. Breakdown products of dextrose (furfural and 5-hydroxymethylfurfural), which may also have harmful effects, were quantitated.
IT 67-47-0, 5-Hydroxymethylfurfural
RL: PRP (Properties)
(toxicity of, as dextrose decomposition product leached from parenteral solns. with rubber stoppers)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



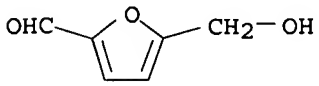
L3 ANSWER 100 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:406257 CAPLUS
DOCUMENT NUMBER: 117:6257
TITLE: Simultaneous determination of 2-furfuraldehyde and 5-(hydroxymethyl)-2-furfuraldehyde by derivative spectrophotometry
AUTHOR(S): Tu, Duonan; Xue, Saifeng; Meng, Chunyuan; Espinosa-Mansilla, Anunciacion; Munoz de la Pena, Arsenio; Salinas Lopez, Francisco
CORPORATE SOURCE: Dep. Anal. Chem., Univ. Extremadura, Badajoz, 06071, Spain
SOURCE: Journal of Agricultural and Food Chemistry (1992), 40(6), 1022-5
CODEN: JAFCAU; ISSN: 0021-8561
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The reactions of 2-furfuraldehyde (FUR) and 5-(hydroxymethyl)-2-furfuraldehyde (HMF) with 2-thiobarbituric acid (TBA) were investigated. These compds. react with TBA in an acidic medium, and the reaction is accelerated by heating at moderate temperature The yellow reaction products show high absorption in the visible region. The spectral overlapping of the reaction products of FUR and HMF with TBA was resolved by first-derivative spectrophotometry. The simultaneous determination of FUR and HMF mixts. is accomplished by taking the first-derivative signal at 436 nm for FUR determination and at 414 nm for HMF determination, resp. The method was applied to a com. orange juice and oral rehydration salt formulations.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANST (Analytical study)
(determination of furfural and, in orange juice and pharmaceuticals by first-derivative spectrophotometry with thiobarbituric acid)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 101 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

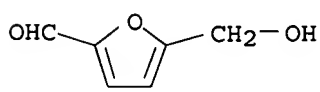
ACCESSION NUMBER: 1991:49542 CAPLUS
DOCUMENT NUMBER: 114:49542
TITLE: Effect of pH on changes occurring in glucose solutions during sterilization
AUTHOR(S): Rogacka-Majcher, Krystyna; Janczar, Lucyna; Krowczynski, Leszek
CORPORATE SOURCE: Akad. Med. im. Mikolaja Kopernika, Krakow, Pol.
SOURCE: Farmacja Polska (1989), 45(8-9), 519-23
CODEN: FAPOA4; ISSN: 0014-8261
DOCUMENT TYPE: Journal
LANGUAGE: Polish

AB Glucose solns. of concentration of 5, 10, 20, 40, and 66% were prepared in McIllvaine's buffer (in the range of pH 3.4-6.4). The solns. were sterilized under various conditions. The stability of glucose in infusion solns. was found to depend on the solution pH, heating time, and time of autoclave cooling. The least decomposition of glucose was shown at pH 4.4-5.0.

IT 67-47-0
RL: FORM (Formation, nonpreparative)
(formation of, as glucose decomposition product, in infusion during sterilization, pH effect on)

RN 67-47-0 CAPLUS

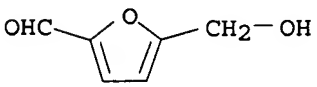
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



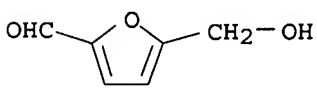
L3 ANSWER 102 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:185762 CAPLUS
DOCUMENT NUMBER: 112:185762
TITLE: Effects of sodium and potassium chlorides in equimolar concentrations on 5-HMF formation in glucose solutions exposed to thermal sterilization
AUTHOR(S): Zakrzewski, Zdzislaw; Furmanczyk, Zdzislaw; Wosinska,

Sylwia
CORPORATE SOURCE: Zakl. Farm. Stosowanej Inst. Nauki Leku, Akad. Med., Warszaw, Pol.
SOURCE: Farmacja Polska (1989), 45(4), 225-8
CODEN: FAPOA4; ISSN: 0014-8261
DOCUMENT TYPE: Journal
LANGUAGE: Polish
OTHER SOURCE(S): CASREACT 112:185762
AB The effects of the presence of NaCl and KCl in glucose infusion solns. on glucose thermal decomposition during sterilization at 120° for 20 or 180 min were studied. Glucose concns. tested were 2.5, 4.3, 5, and 10% and the salt concns. used were equimolar at 0.180-0.225% NaCl and 0.230-0.283% KCl. Both salts increased the formation of the glucose degradation product 5-hydroxymethylfurfural (5-HMF), with NaCl causing more degradation than KCl. The degradation rate increased with salt concns.
IT 67-47-0, 5-Hydroxymethylfurfural
RL: FORM (Formation, nonpreparative)
(formation of, in glucose infusions during thermal sterilization, electrolytes increase of)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 103 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1990:25482 CAPLUS
DOCUMENT NUMBER: 112:25482
TITLE: Effect of the electrolyte components of peritoneal dialysis solutions on stability of glucose
AUTHOR(S): Trzeciak, Marzenna; Zakrzewski, Zdzislaw; Siedlecka, Ewa; Furmanczyk, Zdzislaw
CORPORATE SOURCE: Inst. Drug Sci., Sch. Med., Warsaw, 02-097, Pol.
SOURCE: Acta Poloniae Pharmaceutica (1989), 46(2), 174-8
CODEN: APPHAX; ISSN: 0001-6837
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB The effect of electrolytes present in pharmaceutical normotonic and hypertonic solns. for peritoneal dialysis [Na+ 139, Ca2+ 2, Mg2+ 0.75, Cl- 99.5, AcO- 45, and glucose (I) 83.33 and 333.3 mmoles/L, resp.] on decomposition of I was investigated under the routine sterilization conditions (120°, 100 min). The formation of 5-hydroxymethylfurfural was considered as the decomposition criterion. I was least stable in presence of AcONa and NaCl, and most in that of CaCl2 and MgCl2.
IT 67-47-0, 5-Hydroxymethylfurfural
RL: FORM (Formation, nonpreparative)
(formation of, as glucose degradation product, in peritoneal dialysis solns. during sterilization)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



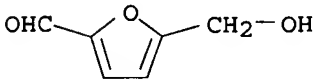
L3 ANSWER 104 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:560171 CAPLUS
DOCUMENT NUMBER: 111:160171
TITLE: HPLC studies on the degradation profiles of glucose 5% solutions subjected to heat sterilization in a microprocessor-controlled autoclave
AUTHOR(S): Cook, A. P.; MacLeod, T. M.; Appleton, J. D.; Fell, A. F.
CORPORATE SOURCE: Area Pharm. Lab., Ninewells Hosp., Dundee, UK
SOURCE: Journal of Clinical Pharmacy and Therapeutics (1989), 14(3), 189-95
CODEN: JCPTED; ISSN: 0269-4727
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A practical useful relationship between degradation and Fo (the equivalent time required in min at 121° to produce the same microbiol. killing effect as the process used) at various temps. is given. This may be of value for identifying the most suitable sterilization conditions for a number of glucose products and other pharmaceuticals. Autoclaving at a high temperature to a low final Fo value gave the maximum product integrity.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: BIOL (Biological study)
(glucose degradation product, in solns. subjected to heat sterilization in autoclave, HPLC study of)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

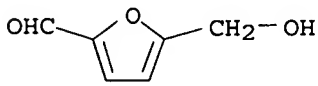


L3 ANSWER 105 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:412380 CAPLUS
DOCUMENT NUMBER: 111:12380
TITLE: Chemical studies on Chanraodangshen (the root of Codonopsis pilosula var. volubilis)
AUTHOR(S): Sha, Dezhi; Lu, Yunru; Shen, Liansheng
CORPORATE SOURCE: Dep. Chin. Pharm., Beijing Coll. Chin. Med., Beijing, Peop. Rep. China
SOURCE: Yaowu Fenxi Zazhi (1989), 9(1), 13-17
CODEN: YFZADL; ISSN: 0254-1793
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Eleven compds. (including 4 pentacyclic triterpenes, alkanes, and 3 sterols) were isolated and identified from petroleum, Et acetate, n-butanol, and water-soluble alkaloid fractions of C. pilosula roots.

IT 67-47-0, 5-(Hydroxymethyl)-2-furaldehyde
RL: BIOL (Biological study)
(isolation and identification of, from Chanraodangshen (Codonopsis pilosula volubilis root))

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



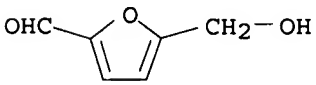
L3 ANSWER 106 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:219225 CAPLUS
DOCUMENT NUMBER: 110:219225
TITLE: Detection of 5-hydroxymethylfurfural by thin-layer chromatography in pharmaceutical preparations containing glucose
AUTHOR(S): Santoro, Maria Ines R. M.; Hackmann, Erika R. M.; Magalhaes, Joao F.
CORPORATE SOURCE: Fac. Cienc. Farm., Univ. Sao Paulo, Sao Paulo, Brazil
SOURCE: Anais de Farmacia e Quimica (1988), Supl., 58-64
CODEN: AFQUEB; ISSN: 0003-2441
DOCUMENT TYPE: Journal
LANGUAGE: Portuguese

AB 5-Hydroxymethylfurfural (HMF), a glucose decomposition product, was determined in glucose-containing oral rehydration salt solns. by TLC. Silica gel GF-254 coated plates were used. The following mobile phases were tested: (a) EtOH-CHCl3-25% NH4OH-H2O (5:3:1.5:0.5); (b) C6H6-MeOH (5:2); (c) C6H6-MeOH (9:1), and (d) EtOHc-iso-PrOH-H2O (65:23:12); and as developing agents: (1) p-anisaldehyde-H2SO4; (2) vanillin-H2SO4; (3) ammoniacal AgNO3, and (4) 2,4-dinitrophenylhydrazine. The plates, before being developed, were observed at UV light (254 and 366 nm), for HMF alone detection. All the developing agents were adequate for HMF and other substances detection. p-Anisaldehyde-H2SO4 was better for differentiation of products. The hRf obtained with the different systems were: (mobile phase, main spot of samples, HMF, glucose): (a), 34, 92, 35; (b), 36 , 86, 38; (c), 0, 24, 0 and (d), 23, 93, 36. The HMF presence in the samples was compared with a standard

IT 67-47-0, 5-Hydroxymethylfurfural
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in pharmaceutical solns. containing glucose by TLC)

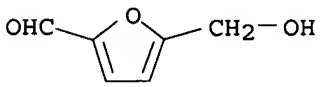
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



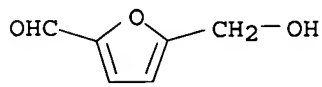
L3 ANSWER 107 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:205645 CAPLUS
DOCUMENT NUMBER: 110:205645
TITLE: Chemical studies on traditional medicines acting on animal isolated organs. 4. The screening of Chinese crude drugs for calcium antagonist activity: identification of active principles from the aerial part of Pogostemon cablin and the fruits of Prunus mume
AUTHOR(S): Ichikawa, Kazuo; Kinoshita, Takeshi; Sankawa, Ushio
CORPORATE SOURCE: Fac. Pharm. Sci., Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1989), 37(2), 345-8
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Hot aqueous exts. of 134 Chinese crude drugs were subjected to screening for inhibitory activity on K+ contracture of guinea pig taenia coli, and significant activity was observed in 17 crude drugs. Chemical investigations of 2 crude drugs, Kakko and Ubai, which originate from P. cablin and P. mume, resp., were undertaken, and patchouli alc. and 5-(hydroxymethyl)-2-furaldehyde were identified as their active principles, resp.

IT 67-47-0, 5-(Hydroxymethyl)-2-furaldehyde
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(of Pogostemon cablin and Prunus mume fruits, calcium antagonist activity of)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 108 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:141365 CAPLUS
DOCUMENT NUMBER: 110:141365
TITLE: Constituents of the stems of Eucommia ulmoides Oliv
AUTHOR(S): Gewali, Mohan Bikram; Hattori, Masao; Namba, Tsuneo
CORPORATE SOURCE: Res. Inst. Wakan-Yaku, Toyama Med. Pharm. Univ., Toyama, 930-01, Japan
SOURCE: Shoyakugaku Zasshi (1988), 42(3), 247-8
CODEN: SHZAAY; ISSN: 0037-4377
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Eucommiol, 1-deoxyeucommiol, syringin, coniferin, koaburaside, geniposide, geniposidic acid, and 5-(hydroxymethyl)-2-furaldehyde were isolated from the stems of E. ulmoides together with large amts. of glucose and sucrose.
IT 67-47-0, 5-(Hydroxymethyl)-2-furaldehyde
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of Eucommia ulmoides stems)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

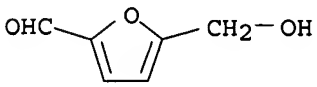


L3 ANSWER 109 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:121226 CAPLUS
DOCUMENT NUMBER: 110:121226
TITLE: Stability of galactose in aqueous solutions
AUTHOR(S): Bhargava, Vijay O.; Rahman, Shafiqur; Newton, David W.
CORPORATE SOURCE: Marion Lab., Kansas City, MO, USA
SOURCE: American Journal of Hospital Pharmacy (1989), 46(1), 104-8
CODEN: AJHPA9; ISSN: 0002-9289
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The stability of 5-30% (weight/volume) galactose in sterile water for injection and acetate and phosphate buffers was studied in relation to buffer concentration, pH, storage at 25, 45, and 65° for 6 wk, and autoclaving at 121° for 30 min. Galactose degradation increased with increasing temperature and buffer concentration Galactose solns. in water and phosphate incurred <5% degradation on autoclaving; however, the 30% solns. in acetate buffers lost up to 21% of initial content. Yellow discoloration of solns. was associated with autoclaving and prolonged exposure at 65° and appeared in some solns. that did not exceed the USP XXI limit of 5-hydroxymethylfurfural

and related compds. in dextrose injection. The estimated room temperature shelf-life of galactose in sterile water for injection sterilized by 0.45-μm-porosity membrane filtration is 4 and one-half mo. Solns. may also be sterilized by autoclaving at 121° for 30 min; galactose solns. containing pH buffers should not be sterilized by autoclaving.

IT 67-47-0, 5-Hydroxymethylfurfural
RL: FORM (Formation, nonpreparative)
(formation of, during galactose degradation in solns.)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

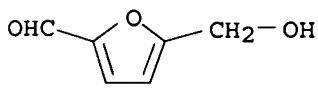


L3 ANSWER 110 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:173652 CAPLUS
DOCUMENT NUMBER: 108:173652
TITLE: Difference spectrophotometric assay of 5-hydroxymethylfurfuraldehyde in hydrolyzed pharmaceutical syrups. II. Isoniazid reagent
AUTHOR(S): Davidson, A. G.; Dawodu, T. O.
CORPORATE SOURCE: Dep. Pharm., Univ. Strathclyde, Glasgow, G1 1XW, UK
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1988), 6(1), 61-6
CODEN: JPBADA; ISSN: 0731-7085
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A rapid difference spectrophotometric assay of 5-hydroxymethylfurfuraldehyde (I) in degraded syrups involves the measurement of the difference absorbance at 340 nm of the isonicotinoyl hydrazone of I, formed at room temperature in an acidic solution of isoniazid, relative to an equimolar solution of I, which was reduced, and the isoniazid reagent. The procedure is accurate, precise and selective for I in the syrups examined The limits of detection and determination were 0.91 μg and 12.4 μg mL-1, resp.

IT 67-47-0, 5-Hydroxymethylfurfuraldehyde
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in com. syrups by difference spectrophotometry, isoniazid in)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



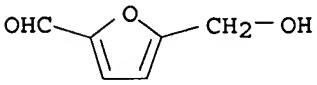
L3 ANSWER 111 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:561796 CAPLUS
DOCUMENT NUMBER: 107:161796
TITLE: Difference spectrophotometric assay of 5-hydroxymethylfurfuraldehyde in hydrolyzed pharmaceutical syrups. I. Sodium borohydride reagent
AUTHOR(S): Davidson, A. G.; Dawodu, T. O.
CORPORATE SOURCE: Dep. Pharm., Univ. Strathclyde, Glasgow, G1 1XW, UK

SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1987), 5(3), 213-22
CODEN: JPBADA; ISSN: 0731-7085
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A rapid difference spectrophotometric procedure is described for the assay of 5-hydroxymethylfurfuraldehyde (5-HMF) in hydrolyzed pharmaceutical syrups. The assay involves measurement of the difference absorbance at 283 nm (ΔA283) of a solution of 5-HMF at pH 8 relative to that of an equimolar solution in which the absorption of the 5-HMF has been destroyed by reduction of the carbonyl group by NaBH4. The ΔA283 is proportional to the concentration of 5-HMF and is unaffected by the presence of sucrose (the sugar component of syrup) or of dextrose or levulose (the principal sugars of invert syrup). The accuracy, precision and selectivity of the method are discussed. The limits of detection and determination are 0.78 and 9.6 μg mL-1, resp. The assay was appled successfully to samples of syrup containing hydroxybenzoate (paraben) preservatives, invert syrup, simple linctus, ephedrine elixir and raspberry syrup.

IT 67-47-0, 5-Hydroxymethylfurfuraldehyde
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in hydrolyzed pharmaceutical syrups by difference spectrophotometry)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

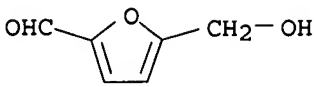


L3 ANSWER 112 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:230336 CAPLUS
DOCUMENT NUMBER: 104:230336
TITLE: Study of the effect of stabilizers and methods of ampul preparation on the stability of multicomponent infusion solutions
AUTHOR(S): Korytnyuk, R. S.
CORPORATE SOURCE: Kiev. Inst. Usoversh. Vrachei, Kiev, USSR
SOURCE: Farmatsiya (Moscow, Russian Federation) (1986), 35(2), 10-13
CODEN: FRMTAL; ISSN: 0367-3014
DOCUMENT TYPE: Journal
LANGUAGE: Russian

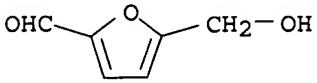
AB The stability of multicomponent infusion solns. containing glucose [50-99-7], KCl, MgCl2, KH2PO4, NaH2PO4, and Na lactate [72-17-3] was studied. The rate of degradation of glucose and lactate in the presence of electrolytes was lower in concentrated than in diluted solns. The stability of the solution was improved if stored in ampuls (ampuling in a CO2 medium) and by addition of 0.1% Na metabisulfite as an antioxidant. The preparation of solns. with 10-fold greater concentration as a method for improving the stability is also discussed.

IT 67-47-0
RL: BIOL (Biological study)
(of infusion solns., as glucose degradation product, stability in relation to)

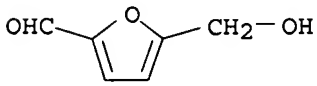
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 113 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:31976 CAPLUS
DOCUMENT NUMBER: 102:31976
ORIGINAL REFERENCE NO.: 102:5073a,5076a
TITLE: A review of 5-hydroxymethylfurfural (HMF) in parenteral solutions
AUTHOR(S): Ulbricht, Richard J.; Northup, Sharon J.; Thomas, John A.
CORPORATE SOURCE: Travenol Lab., Inc., Morton Grove, IL, 60053, USA
SOURCE: Fundamental and Applied Toxicology (1984), 4(5), 843-53
CODEN: FAATDF; ISSN: 0272-0590
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with 35 refs. of the chemical formation, toxicity, and pharmacokinetics of 5-hydroxymethylfurfural (HMF) [67-47-0] and certain other decomposition products found in parenteral solns.
IT 67-47-0 67-47-0D, degradation products
RL: BIOL (Biological study)
(in parenteral solns., properties of)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

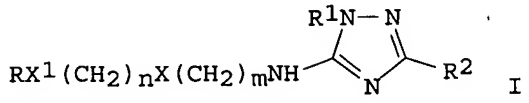


L3 ANSWER 114 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:550671 CAPLUS
DOCUMENT NUMBER: 95:150671
ORIGINAL REFERENCE NO.: 95:25223a,25226a
TITLE: 1,2,4-Triazole derivatives and pharmaceutical compositions containing them
INVENTOR(S): Bradshaw, John; Clitherow, John Watson; Bays, David Edmund; Hayes, Roger; MacKinnon, John Wilson Macfarlane
PATENT ASSIGNEE(S): Glaxo Group Ltd., UK
SOURCE: Eur. Pat. Appl., 36 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

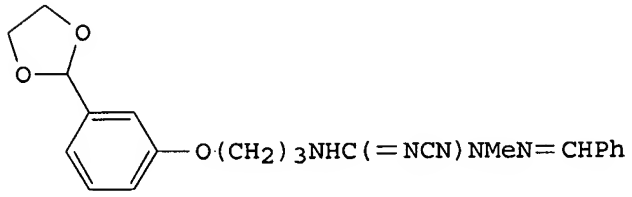
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 29303	A1	19810527	EP 1980-303729		19801022
EP 29303	B1	19850130			
R: BE, CH, DE, FR, GB, IT, NL, SE					
AU 8063602	A	19810430	AU 1980-63602		19801022
AU 539189	B2	19840913			
GB 2063253	A	19810603	GB 1980-34046		19801022
GB 2063253	B	19830914			
JP 56090071	A	19810721	JP 1980-148111		19801022
ZA 8006495	A	19820127	ZA 1980-6495		19801022
PRIORITY APPLN. INFO.:			GB 1979-36545	A	19791022
			GB 1979-36546	A	19791022
			GB 1980-27740	A	19800827

OTHER SOURCE(S): CASREACT 95:150671; MARPAT 95:150671

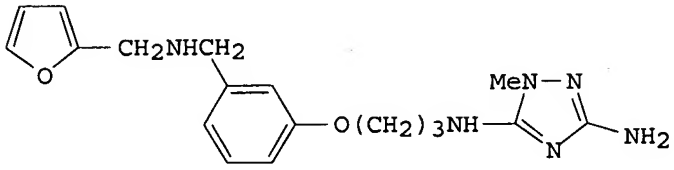
GI



I



II



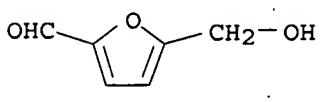
III

AB Triazoles I (X = CH2, O, S, NH; X1 = optionally substituted 2,5-furandiyl, 2,5-thiophenediyl, m-C6H4, p-C6H4; R = aminoalkyl; R1 = H, optionally substituted alkyl, alkenyl; R2 = H, optionally substituted alkyl, alkenyl, OH, alkoxy, amino; m = 2-4; n = 0-2) were prepared Thus, 3.06 g II was treated with 15 mL furfurylamine and NaBH4 to give 0.77 g III which had an ED50 of 0.095 mg/kg for inhibiting histamine-induced stomach secretion in the rat stomach preparation

IT 67-47-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with aminomethylphenoxypropyltriazolediamine)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



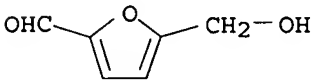
L3 ANSWER 115 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1979:192650 CAPLUS
DOCUMENT NUMBER: 90:192650
ORIGINAL REFERENCE NO.: 90:30539a,30542a
TITLE: Rapid, stability-indicating, high-pressure liquid chromatographic determination of theophylline, guaifenesin, and benzoic acid in liquid and solid pharmaceutical dosage forms
AUTHOR(S): Heidemann, D. R.
CORPORATE SOURCE: Dorsey Lab. Div., Sandoz, Inc., Lincoln, NE, USA
SOURCE: Journal of Pharmaceutical Sciences (1979), 68(4), 530-2
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Theophylline [58-55-9], guaifenesin [93-14-1], and benzoic acid [65-85-0] were determined by reversed-phase high-pressure liquid chromatog. without interference from active and(or) vehicle decomposition A degradation product of sucrose, 5-hydroxymethylfurfural [67-47-0], can be identified and quantified in liquid samples simultaneously.

IT 67-47-0
RL: ANST (Analytical study)
(sucrose degradation product, determination of, in pharmaceuticals, by high-pressure liquid chromatog.)

RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



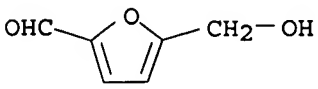
L3 ANSWER 116 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1977:522848 CAPLUS
DOCUMENT NUMBER: 87:122848
ORIGINAL REFERENCE NO.: 87:19441a,19444a
TITLE: Spectrophotometric determination of diphenhydramine hydrochloride in pharmaceutical preparations
AUTHOR(S): Maghssoudi, Rostam H.; Fawzi, Ahmad B.; Moosavi Meerkalaiee, Majd Aldeen N.
CORPORATE SOURCE: Coll. Pharm., Tehran Univ., Tehran, Iran
SOURCE: Journal - Association of Official Analytical Chemists (1977), 60(4), 926-8
CODEN: JANCA2; ISSN: 0004-5756
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A spectrophotometric method was developed for determining diphenhydramine-HCl [147-24-0], based on CHCl3 extraction of its complex formed with bromocresol green. The complex solution in CHCl3 showed maximum absorption at 415 nm and obeyed Beer's law over the range 3.0-12.0 μg/mL. The molar absorptivity of the complex was 2.02 + 104. Complex formation and extraction were complete and quant. over the pH range 2-5. The ratio of diphenhydramine to bromocresol green was 1:1. Excipients, coloring matter, flavoring agents, and other substances likely to be present in diphenhydramine prepns. did not interfere with the determination Direct detns. in tablet, capsule, sirup, and lotion prepns. were carried out, and the average recovery was 100 ± 1.0%.

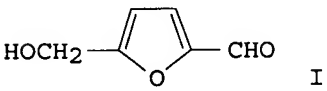
IT 67-47-0
RL: USES (Uses)
(diphenhydramine hydrochloride determination in presence of)

RN 67-47-0 CAPLUS

CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

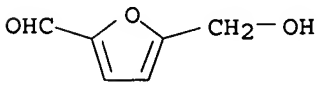


L3 ANSWER 117 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1977:177217 CAPLUS
DOCUMENT NUMBER: 86:177217
ORIGINAL REFERENCE NO.: 86:27755a,27758a
TITLE: Levels of 5-hydroxymethylfurfural in dextrose injection
AUTHOR(S): Murty, B. S. R.; Kapoor, J. N.; Smith, F. X.
CORPORATE SOURCE: Invenex Pharm., Grand Island, NY, USA
SOURCE: American Journal of Hospital Pharmacy (1977), 34(2), 205-6
CODEN: AJHPA9; ISSN: 0002-9289
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



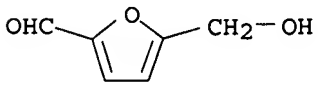
I

AB A freshly prepared solution of dextrose [50-99-7] (1 g/2 mL) had a 5-hydroxymethylfurfural (I) [67-47-0] level of 0.10 μg/mL. The level in 50% dextrose injection, within 24 hr of manufacturing, was 0.72 μg/mL. The level of I in 50% dextrose injection, after storage for 4 years at 70°, was 5.80 μg/mL. It is recommended that a quant. procedure for determining this impurity be included in quality control testing of dextrose injection.
IT 67-47-0
RL: BIOL (Biological study)
(as impurity, in dextrose injection solns.)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)

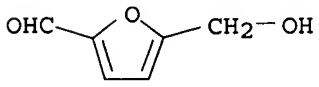


L3 ANSWER 118 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1975:432967 CAPLUS
DOCUMENT NUMBER: 83:32967
ORIGINAL REFERENCE NO.: 83:5209a,5212a
TITLE: Spectrophotometric evaluation of mannitol solutions for parenteral use
AUTHOR(S): Kubiak, Zbigniew; Latka, Anna
CORPORATE SOURCE: Akad. Med., Krakow, Pol.
SOURCE: Farmacja Polska (1975), 31(1), 25-30
CODEN: FAPOA4; ISSN: 0014-8261
DOCUMENT TYPE: Journal
LANGUAGE: Polish

AB The 6 parenteral mannitol [69-65-8] solns. analyzed showed varying levels of contamination by 5-hydroxymethylfurfural [67-47-0]. The presence of the latter was determined from absorption at 280 nm, and appeared to be related to inadequate purification of the pharmaceutical.
IT 67-47-0
RL: BIOL (Biological study)
(mannitol parenteral solns. contamination with)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



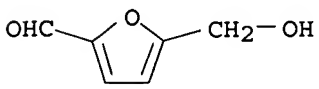
L3 ANSWER 119 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:41087 CAPLUS
DOCUMENT NUMBER: 80:41087
ORIGINAL REFERENCE NO.: 80:6703a,6706a
TITLE: Determination of diphenhydramine hydrochloride in elixir
AUTHOR(S): Woo, Diane; Yen, John K. C.; Heimlich, Kenneth R.
CORPORATE SOURCE: Smith Kline and French Canada Ltd., Montreal, QC, Can.
SOURCE: Journal of Pharmaceutical Sciences (1973), 62(12), 1993-4
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A uv spectrometric method for the determination of diphenhydramine-HCl in the presence of its postulated decomposition products and 5-(hydroxymethyl)-2-furaldehyde in elixirs was developed. The method involves simple estns. with cyclohexane and is suitable for routine and stability assays of various pharmaceutical liquid formulation. The technique is a modification of the USP XVIII method.
IT 67-47-0
RL: ANST (Analytical study)
(diphenhydramine determination in presence of)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 120 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1972:466146 CAPLUS
DOCUMENT NUMBER: 77:66146
ORIGINAL REFERENCE NO.: 77:10895a,10898a
TITLE: Determination of glucose stability in a concentrated plasma-replacing Ringer solution
AUTHOR(S): Shpak, R. S.
CORPORATE SOURCE: Kiev. Inst. Usoversh. Vrachei, Kiev, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1972), 6(5), 50
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Decomposition products of glucose were determined in concentrated Ringers solution containing 18

g NaCl, 0.4 g KCl and CaCl2, 2 g anhydrous glucose, made up to 100 ml with water for injection. The solution was stabilized with 0.1N NaOH to pH 3.8-4.5 and with 0.05% Ca Na2-EDTA, filtered, sealed in ampuls, and sterilized at 100° for 1 hr. The uv spectrum showed no decomposition products prior to sterilization, 2 slight maximum in the 220-230 and 280-300 nm regions after sterilization, and after prolonged heating, resembled that of hydroxymethylfurfural (I). Using a molar extinction coefficient of 16,900 at λmaximum 282.5 nm, 12-15 times as much I was present in Ringer's solution which was not stabilized with 0.1N NaOH and CaNa2-EDTA after 6-12 mo. storage.

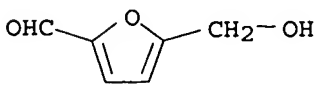
IT 67-47-0
RL: BIOL (Biological study)
(glucose thermal decomposition product)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 121 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1972:131432 CAPLUS
DOCUMENT NUMBER: 76:131432
ORIGINAL REFERENCE NO.: 76:21253a,21256a
TITLE: Physicochemical examination of glucose injection
AUTHOR(S): Okada, Satoshi; Iga, Soichiro; Ueoka, Sumiko; Isaka, Hiroshi
CORPORATE SOURCE: Japan
SOURCE: Eisei Shikensho Hokoku (1971), (89), 87-90
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The conversions of glucose, on heating in water, to 5-hydroxymethylfurfural (I) and 3-deoxyglucosone (II), and further to acidic substances were investigated by uv and pH methods, resp. In addition, the quality of glucose injections on the market was examined The conversions of glucose to I and II on heating (60 min. at 115°) were enhanced with increasing glucose concns. (5 to 10 and 20). The conversions of I to acidic substances, which reflected a pH decrease of glucose aqueous solns., were also enhanced when temperature or heating time was increased (100° to 115 and 121° and 20 min to 60 and 100 min). The amts. of I or II and pH of 5 and 20 glucose injections were measured and a correlation anal. was made between pH (x) and the concentration of I or II (y, uv absorption at 284 or 228 mμ). There was a significant neg. correlation at 5 level between pH and the concentration of I, but not between pH and that of II. The regression lines for 5 and 20 glucose injections were x = 4.785 - 0.487y and x = 5.020 - 0.387y, resp. The quality of glucose injections was highly dependent on heating conditions for sterilization.

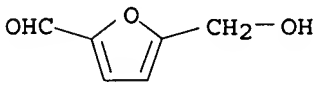
IT 67-47-0
RL: BIOL (Biological study)
(glucose decomposition product)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



L3 ANSWER 122 OF 122 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1956:10105 CAPLUS
DOCUMENT NUMBER: 50:10105
ORIGINAL REFERENCE NO.: 50:2121g-h
TITLE: Spectrochemical study of parenteral solutions. I. Dextrose injection
AUTHOR(S): Iwamoto, Takio; Saito, Moritami; Taga, Mitsuhiko
CORPORATE SOURCE: Hokkaido Inst. Public Health, Sapporo
SOURCE: Yakugaku Zasshi (1955), 75, 1158-60
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB In examining 20% parenteral solns. of glucose by ultraviolet absorption it was found that com. products contained 5-hydroxymethyl-furfural (I) with λmaximum 2840 A., a thermal decomposition product of glucose, and a substance (II) with λmaximum 2270 A., which is chiefly formed by sterilization at 100°. I is formed at a higher temperature The II was assumed to have the structure of >C:C.C:C< or >C:C.C:O.

IT 67-47-0P, 2-Furaldehyde, 5-(hydroxymethyl)-
RL: PREP (Preparation)
(in glucose com. prepns.)
RN 67-47-0 CAPLUS
CN 2-Furancarboxaldehyde, 5-(hydroxymethyl)- (CA INDEX NAME)



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